

Prof CARLA ANDREANI

Elenco delle Pubblicazioni

- 1. PUBBLICAZIONI SU RIVISTE INTERNAZIONALI CON REFEREES**
- 2. LIBRI**
- 3. COMUNICAZIONI SU INVITO A CONVEGNI E SCUOLE (selezione)**
- 4. LIBRI DI CONFERENZE E PROCEEDINGS (selezione)**
- 5. ARTICOLI DIVULGATIVI**
- 6. RAPPORTI TECNICI (selezione)**

Ottobre 2017

Ai sensi del DPR n. 445/2000 e consapevole che le dichiarazioni mendaci sono punite ai sensi del codice penale e delle leggi speciali in materia, la sottoscritta Carla Andreani dichiara che quanto di seguito riportato corrisponde a verità.

1. PUBBLICAZIONI SU RIVISTE INTERNAZIONALI CON REFEREES

LISTA DELLE PUBBLICAZIONI

178. G. Romanelli, S. Rudic, M. Zanetti, **C. Andreani**, F. Fernandez-Alonso, G. Gorini, M. Krzystyniak, G. Škoro
Measurement of the para-hydrogen concentration in the ISIS moderators using neutron transmission and thermal conductivity
Submitted to publication to *Neutron Instrument and Methods A* 9/2017
177. *Andrea Fedi, Marco Ottavi, Gianluca Furano, Antimo Bruno, Roberto Senesi, Carlo Cazzaniga, **Carla Andreani***
"High-energy Neutrons Characterization of a Safety Critical Computing System"
2017 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT)
176. *Francesco Mallamace, Roberto Senesi, Carmelo Corsaro, Giovanni Romanelli, Domenico Mallamace, and **Carla Andreani***
"Compton Neutron scattering reveals the onset of the tetrabonded structure in bulk liquid water"
Submitted to Scientific Reports September (2017)
175. *A. Parmentier, **C. Andreani**, G. Romanelli, J. J. Shephard, C. G. Salzmann and R. Senesi*
"Hydrogen mean force and anharmonicity in polycrystalline and amorphous ice"
Frontiers of Physics **13**(1), 136101 (2018) (2017)
174. *R. Senesi, Giuseppe Gorini, **Carla Andreani***
"[Fast neutron irradiation facilities for electronics and materials](#)"
Il Nuovo Saggiatore, Vol. 33, 15-20, (2017)
173. *G. Festa, **Carla Andreani**, L. Arcidiacono, G. Burca, W. Kockelmann, T. Minniti, R. Senesi*
"Characterization of γ -ray background at IMAT beamline of ISIS Spallation Neutron Source"
JINST August (2017), <https://doi.org/10.1088/1748-0221/12/08/P08005>

172. **Carla Andreani**, F. Aliotta, L. Arcidiacono, M. Borla, D. Di Martino, F. Facchetti, E. Ferraris, G. Festa, G. Gorini, W. Kockelmann, J. Kelleher, D. Malfitana, D. Micieli, T. Minniti, E. Perelli Cippo, R. Ponterio, G. Salvato, R. Senesi, V. Turina, C. Vasi and C. Greco
 "A neutron study of sealed pottery from the grave-goods of Kha and Merit"
Journal of Analytical Atomic Spectrometry J. Anal. At. Spectrom., **32**, 1342 (2017) DOI:10.1039/c7ja00099e
171. Kun V. Tian, Giulia Festa, László Szentmiklósi, Boglárka Maróti, Laura Arcidiacono, Giuseppina Laganà, **Carla Andreani**, Silvia Licoccia, Roberto Senesi, Paola Cozza
 "Compositional studies of functional orthodontic archwires using prompt -gamma activation analysis at a pulsed neutron source"
Journal of Analytical Atomic Spectrometry **32**, 1420 (2017)
 DOI: 10.1039/c7ja00065k
170. G Romanelli, M Krzystyniak, R Senesi, D. Raspino, J Boxall, D Pooley, S Moorby, E Schooneveld, N J Rhodes, **C Andreani** and F Fernandez-Alonso
 "Complete characterisation of incident beam and current diffraction capabilities on the VESUVIO spectrometer"
Measurement Science and Technology **28**, Number 9, 1-6 (2017)
<http://iopscience.iop.org/article/10.1088/1361-6501/aa7c2a/meta>
169. Kun V. Tian, Giulia Festa, Francesco Basoli, Giuseppina Laganà, Antonella Scherillo, **Carla Andreani**, Patrizia Bollero, Silvia Licoccia, Roberto Senesi and Paola Cozza
 "Orthodontic archwire composition and phase analyses by neutron spectroscopy"
Dental Material Journal (2017), Article ID: 2016-206doi:
<http://doi.org/10.4012/dmj.2016-206>
168. **C. Andreani**, Maciej Krzystyniak, G. Romanelli, R. Senesi and F. Fernandez-Alonso
 "Electron-volt neutron spectroscopy: beyond fundamental systems"
'Advances in Physics' **66**, 1-73, (2017)
167. G. Romanelli, A. Liscio, R. Senesi, R. Zamboni, E. Treossi, F. Liscio, G. Giambastiani, V. Palermo, Felix Fernandez-Alonso and **C. Andreani**
 "Self confinement of water in graphene-oxide Membranes"
Carbon **108**, 199-203 (2016),
 doi:10.1016/j.carbon.2016.07.021
166. I. S. Anderson, **C. Andreani**, J. Carpenter, G. Festa, G. Gorini, C.-K Loong, R. Senesi

- “Research Opportunities with Compact Accelerator-Driven Neutron Sources”
Physics Reports **654**, 1–58 (2016)
<http://dx.doi.org/10.1016/j.physrep.2016.07.007>
165. E. M. Schooneveld, A. Pietropaolo, **C. Andreani**, E. Perelli Cippo, N. J. Rhodes, R. Senesi, M. Tardocchi, G. Gorini
 “Radiative neutron capture as a counting technique at pulsed spallation neutron sources: a review of current progress”
Reports on Progress in Physics **79**, 094301 (2016)
164. **Carla Andreani**, Giovanni Romanelli, and Roberto Senesi
 “Direct measurements of quantum kinetic energy tensor in stable and metastable water near the triple point: an experimental benchmark”
[*Journal of Physical Chemistry Letters*](#) **7** (12), 2216–2220 (2016)
163. Giulia Festa, Laura Arcidiacono, Alfio Pappalardo, Triestino Minniti, Carlo Cazzaniga, Antonella Scherillo, **Carla Andreani** and Roberto Senesi
 “Isotope identification capabilities using time resolved prompt gamma emission from epithermal neutrons”
 Published on JINST **11**, (2016), doi:[10.1088/1748-0221/11/03/C03060](#)
162. I. Bukreeva, A. Mittone, A. Bravin, M. Alessandrelli, P. Coan, V. Formoso, R. G. Agostino, M. Giocondo, F. Ciuchi, M. Fratini, G. Festa, **C. Andreani**, R. Bartolino, A. Lamarra, G. Gigli, G. Ranocchia, A. Cedola
 “Virtual unrolling and deciphering of Herculaneum papyri by X-ray phase-contrast tomography”
Scientific Report, **6**, 27227 (2016), DOI:[10.1038/srep27227](#)
161. G. Romanelli, R. Senesi, Xuan Zhang, Kian Ping Loh and **C. Andreani**
 “Probing the effects of 2D confinement on hydrogen dynamics in water and ice adsorbed in graphene oxide sponges”
Phys. Chem. Chem. Phys. **17**, 31680-31684 (2015)
160. A. Parmentier, J. J. Shephard, G. Romanelli, R. Senesi, C. G. Salzmann and **C. Andreani**
 “Evolution of Hydrogen Dynamics in Amorphous Ice with Density”
Journal of Physical Chemistry Letters **6**, 2038-2042 (2015)
159. G. Festa, E. Perelli Cippo, D. Di Martino, R. Cattaneo, S. Senesi, **C. Andreani**, E. Schooneveld, W. Kockelmann, N. Rhodes, A. Scherillo, K. Kudejova, K. Biro, K. Duzs, Z. L. Hajna and G. Gorini

- "Neutron Resonance Transmission Imaging for 3D elemental mapping at the ISIS spallation neutron source"
Journal of Analytical Atomic Spectrometry **30**, 745 (2015)
 doi: 10.1039/C4JA00384E
158. G. Gorini G, G. Festa and **C. Andreani**
 "Epithermal neutron instrumentation at ISIS"
Journal of Physics, Conference Series **571**, 012005 (2014)
 doi:10.1088/1742-6596/571/1/012005
157. **C. Andreani**, M. Ceriotti, F. Fernandez-Alonso, G. Gorini, M. Krzystyniak, A. Parmentier, S. Parker, A. Seel, R. Senesi R and L. Walewski
 "Discussion: Measurement and Instrumentation"
Journal of Physics, Conference Series **571**, 012010 (2014)
 doi:10.1088/1742-6596/571/1/012010
156. G. Romanelli, F. Fernandez-Alonso and **C. Andreani**
 "The Harmonic Picture of Nuclear Mean Kinetic Energies in Heavy Water"
Journal of Physics, Conference Series **571**, 012003—012009 (2014)
 doi:10.1088/1742-6596/571/1/012003
155. **C. Andreani**, M. Ceriotti, G. Chass, C. Drechsel-Grau, F. Fernandez-Alonso, N. Greaves, N. Gidopoulos, M. Krzystyniak, A. Parmentier, K. Refson, G. F. Reiter, G. Romanelli, A. Seel, L. Walewski and T. Wiles
 "Discussion: Nuclear Quantum Dynamics – Protons and Beyond"
Journal of Physics, Conference Series **571**, 012004 (2014)
 doi:10.1088/1742-6596/571/1/012004
154. R. Senesi, A. I. Kolesnikov, **C. Andreani**
 "Measurement of proton momentum distribution using a direct geometry instrument"
Journal of Physics, Conference Series **571**, 012007--012019 (2014)
 doi:10.1088/1742-6596/571/1/012007
153. Alice Miceli, Giulia Festa, Roberto Senesi, Enrico Perelli Cippo, Luca Giacomelli, Marco Tardocchi, Antonella Scherillo, Erik Schooneveld, Christopher Frost, Giuseppe Gorini and **Carla Andreani**
 "Measurements of Gamma-Ray Background Spectra at Spallation Neutron Source Beamlines"
Journal of Analytical Atomic Spectrometry, **29**, 1897-1903 (2014)
 DOI: 10.1039/C4JA00183D

152. G. Festa, G. Tardino, L. Pontecorvo, D. C. Mannes, R. Senesi, G. Gorini, **C. Andreani**
 "Neutrons and Music: imaging investigation of ancient flute musical instruments"
Neutron Instrument and Methods B **336**, 63–69 (2014)
151. **C. Andreani**, I. S. Anderson, J. M. Carpenter, G. Festa, G. Gorini, C.-K. Loong, and R. Senesi
 "Applications of Compact Accelerator-driven Neutron Sources: An Updated Assessment from the Perspective of Materials Research in Italy"
Physics Procedia **60**, 228 – 237 (2014)
[doi:10.1016/j.phpro.2014.11.032](https://doi.org/10.1016/j.phpro.2014.11.032)
150. A. Miceli, G. Festa, R. Senesi, G. Gorini, **C. Andreani**
 "Localization of inclusions in multiple prompt gamma ray analysis: a feasibility study"
Journal of Physics: Conference Series **470**, 012001 (2013)
<http://doi.org/10.1088/1742-6596/470/1/012001>
149. A. Miceli, G. Festa, G. Gorini, R. Senesi, **C. Andreani**
 "Pulsed neutron gamma-ray logging in archaeological site survey"
Measurement Science and Technology **24**, 125903 (2013)
<http://doi.org/10.1088/0957-0233/24/12/125903>
148. R. Senesi, G. Romanelli, M. A. Adams and **C. Andreani**
 "Temperature dependence of the zero point kinetic energy in ice and water above room temperature"
Chemical Physics **427**, 111-116 (2013)
<http://dx.doi.org/10.1016/j.chemphys.2013.09.010>
147. **C. Andreani**, G. Romanelli and R. Senesi
 "A combined INS and DINS study of proton quantum dynamics of ice and water across the triple point and in the supercritical phase"
Chemical Physics **427**, 106 -110 (2013)
<http://dx.doi.org/10.1016/j.chemphys.2013.07.009>
146. A. Miceli, G. Festa, R. Senesi, G. Gorini, E. Perelli Cippo, R. Cattaneo, **C. Andreani**
 "On-Site Neutron Logging for Cultural Heritage Applications: a Monte Carlo study"
CHNT 17: 17th Conference on Cultural Heritage and New Technologies 2012, Vienna (2013)
145. G. Romanelli, M. Ceriotti, D. E. Manolopoulos, C. Pantalei, R. Senesi and

C. Andreani

‘Direct Measurement of Competing Quantum Effects on the Kinetic Energy of Heavy Water upon Melting’
The Journal of Phys. Chem. Lett. **508**, 3251–3256 (2013).

144. R. Senesi, D. Flammini, A. I. Kolesnikov, E. Murray, G. Galli, and C. Andreani
“The quantum nature of the OH stretching mode in ice and water probed by neutron scattering experiments”
J. Chem. Phys. **139**, 074504 (2013)
143. G. Festa, A. Pietropaolo, F. Grazzi, L. F. Sutton, A. Scherillo, L. Bognetti, A. Bini, E. Barzagli, E. Schooneveld and C. Andreani
“Simultaneous and integrated neutron-based techniques for material analysis of a metallic ancient flute”
Meas. Sci. Technol. **24**, 095601 (2013)
142. R. Senesi, D. Flammini, G. Romanelli, C. Andreani
“From neutron Compton profiles to momentum distribution: assessment of direct numerical determination”
Nuclear Inst. and Methods in Physics Research, A, **704**, 36–39 (2013)
141. L. Giacomelli, M. Rebai, E. Perelli Cippo, M. Tardocchi, A. Fazzi, C. Andreani, A. Pietropaolo, C. D. Frost, N. Rhodes, E. Schooneveld, G. Gorini
“Diamond detector for high rate monitors of fast neutrons beams”
AIP Publishing, *Proceedings of the International Conference on Fusion for Neutrons and Subcritical Nuclear Fission*; Varenna; Italy; **1442**, 305-310 (2012)
140. M Rebai, L Giacomelli, C Andreani, A Fazzi, C D Frost, E Perelli Cippo, A Pietropaolo, N Rhodes, M Tardocchi, E Schooneveld and G Gorini
“Diamond detectors for fast neutron measurements at pulsed spallation sources”
Journal of Instrumentation, *JINST*, **7**, p. 1-17, (2012) ISSN: 1748-0221, doi: 10.1088/1748-0221/7/05/C05015
139. S. Gerardin, M. Bagatin, A. Ferrario, A. Paccagnella, A. Visconti, S. Beltrami, C. Andreani, G. Gorini, C. D. Frost
“Neutron-induced Upsets in NAND Floating Gate Memories”
Transactions on Device and Materials Reliability **12**, 437-444, (2012)
10.1109/TDMR.2012.2192440
138. M. Bagatin, S. Gerardin, A. Paccagnella, C. Andreani, G. Gorini, C. D. Frost

- “Temperature Dependence of Neutron-induced Soft Errors in SRAMs”
 Microelectronics Reliability **52** (1) 289-293 (2012)
 doi:10.1016/j.microrel.2011.08.011 Key
137. D. Flammini, A. Petropaolo, R. Senesi, **C. Andreani**, F. McBride, A. Hodgson, M. Adams, L. Lin, R. Car
 “Spherical momentum distribution of the protons in hexagonal ice from modeling of inelastic neutron scattering data”
J. Chem. Phys. **136**, 024504 (2012)
 http://doi:10.1063/1.3675838
136. A. M. Paradowska, A. Tremsin, J. F. Kelleher, S.Y. Zhang, S. Paddea, G. Burca, J. A. James, A. Rehan, N. H. Faisal, F. Grazzi, G. Festa, **C. Andreani**, F. Civita, P. J. Bouchard, W Kockelman, M. E. Fitzpatrick
 “Modern and Historical Engineering Concerns Investigated by Neutron Diffraction on ENGIN-X ‘
Journal of Solid Mechanics and Materials Engineering, **6**, 408-418 (2012), doi: 10.1299/jmmp.6.408
135. M Rebai, **C Andreani**, A Fazzi, CD Frost, L Giacomelli, G Gorini, E. Milani, E. Perelli Cippo, A. Pietropaolo, G. Prestopino, E. Schooneveld, M. Tardocchi, C. Verona, G. Verona Rinati
 “Fission diamond detector tests at the ISIS spallation neutron source”
Nucl Phys B (Proc Suppl), **215**, 313-315 (2011)
 doi:10.1016/j.nuclphysbps.2011.04.041
134. **C. Andreani**, D. Colognesi, A Pietropaolo and R. Senesi
 “Ground state proton dynamics in stable phases of water”
Chem Physics Letters, Frontier Article **518**, 1-6 (2011),
 doi:10.1016/j.cplett.2011.09.036
133. J. Mayers, N. I. Gidopoulos, M. A. Adams, G. Reiter, **C. Andreani** and R. Senesi.
 Comment on "High energy neutron scattering from hydrogen using a direct geometry spectrometer", C Stock, R A Cowley, J W Taylor and S. M. Bennington, *Phys Rev B* **84**, 056301 (2011)
132. A. Pietropaolo, **C. Andreani**, M. Rebai, L. Giacomelli, G. Gorini, E. Perelli Cippo, M. Tardocchi, A. Fazzi, G. Verona Rinati, C. Verona, M. Marinelli, E. Milani, C. D. Frost, E. M. Schooneveld
 “Fission diamond detectors for fast-neutron ToF spectroscopy”
Europhysics Letters, **94**, 62001 (2011)
 doi:10.1209/0295-5075/94/62001

131. Enrico Perelli Cippo, Alessandro Borella, Giuseppe Gorini, Winfried Kockelmann, Michael Moxon, Hans Postma, Nigel J. Rhodes, Peter Schillebeeck, Eric M. Schoonenveld, Marco Tardocchi, Krisztina Dusz, Zsuzsa Hajnal, Katalin Biro, Simone Porcinai, **Carla Andreani** and Giulia Festa
 "Imaging of cultural heritage objects using neutron resonances"
J. Anal. At. Spectrom., **26**, 992-999 (2011)
 doi:10.1039/c0ja00256a

130. G. Festa, R. Senesi, M. Alessandroni, **C. Andreani**, G. Vitali, S. Porcinai, A. M. Giusti, T. Materna, A. M. Paradowska
 "Non destructive neutron diffraction measurements of cavities, inhomogeneities and residual strain in bronzes of Ghiberti's relief from the Gates of Paradise"
Journal of Applied Physics **109**, 064908 (2011)

129. L. Giacomelli, **C. Andreani**, A. Fazzi, C.D. Frost, G. Gorini, E. Perelli Cippo, A. Pietropaolo, M. Rebai, H. Schuhmachere, M. Tardocchi, C. Verona, G. Verona Rinati and A. Zimbal
 "Diamond detectors for fast neutron irradiation experiments"
Nuclear Physics B (Proceedings Supplements), **215**, 242-246 (2011)
 doi:10.1016/j.nuclphysbps.2011.04.020

128. A. Pietropaolo, **C. Andreani**, M. Rebai, L. Giacomelli, G. Gorini, E. Perelli Cippo, M. Tardocchi, A. Fazzi, G. Verona Rinati, C. Verona, M. Marinelli, E. Milani, C. D. Frost, E. M. Schooneveld
 "Single-crystal diamond detector for time-resolved measurements of a pulsed fast neutron beam"
Europhysics Letters, **92**, 68003 (2010)
 doi:10.1209/0295-5075/92/68003

127. M. Alessandroni, A. M. Paradowska, E. Perelli Cippo, R. Senesi, **C. Andreani**, G. Gorini, P. Montedoro, F. Chiti, D. Sala, D. Spinelli
 Investigation of Residual Stress Distribution of Wheel Rims Using Neutron Diffraction
Materials Science Forum **681**, 522-526, (2011) Volume Residual Stresses VIII Edited by Paolo Scardi and Cristy L. Azanza Ricardo

126. C. Pantalei, R. Senesi, **C. Andreani**, P. Sozzani, A. Comotti, S. Bracco, M. Beretta, P. Sokol, and G. Reiter
 "Interaction of single water molecules with silanol in mesoporous silica"
Phys. Chem. Chem. Phys., **13**, 6022-6028 (2011)

125. S. Gerardin, M. Bagatin, A. Paccagnella, G. Cellere, A. Visconti, S. Beltrami, **C. Andreani**, G. Gorini, C. Frost
 "Scaling Trends of Neutron Effects in MLC NAND Flash Memories"
 IEEE International Reliability Physics Proceedings/ Sponsered by the IEEE Electronic Devices Society ad the IEEE Reliaility Society. ISSN: 1082:7285 (2010), doi: 10.1109/IRPS.2010.5488797 (2010)
124. R. Bedogni, A. Esposito, **C. Andreani**, R. Senesi, M. P. De Pascale, P.G. Picozza, A. Pietropaolo, G. Gorini, C. D. Frost, and S. Ansell
 Characterization of the neutron field at the ISIS-VESUVIO facility by means of a bonner sphere spectrometer
Nuclear Instruments and Methods in Physics Research Section A **612**, 143– 148, (2009)
123. A. Pietropaolo, R. Senesi, **C. Andreani**, J. Mayers
 "Quantum Effects in Water: Proton Kinetic Energy Maxima in Stable and Supercooled Liquid"
Brazilian Journal of Physics, **39**, 318, (2009)
122. A. Pietropaolo, E. Perelli Cippo, G. Gorini, M. Tardocchi, E. M. Schooneveld, **C. Andreani** and R. Senesi
 "γ-ray background sources in the VESUVIO spectrometer at ISIS spallation neutron source"
Nuclear Instruments and Methods in Physics Research A, **608**, Issue 1, 121, (2009)
121. A. Pietropaolo, R. Senesi, **C. Andreani**, A. Botti, M. A. Ricci, and F. Bruni
 "Pietropaolo et al. Reply"
Phys. Rev. Lett. **103**, 069802 (2009)
120. G. Festa, **C. Andreani**, M. P: De Pascale, R. Senesi, G. Vitali, S. Porcinai , A. M.Giusti, R. Schulze, L. Canella, P. Kudejova, M. Muhlbauer, B. Schillinger "A non destructive stratigraphic and radiographic neutron study of Lorenzo Ghiberti's reliefs from Paradise and North doors of Florence Baptistery"
J. Appl. Phys. **106**, 074909 (2009)
119. A. Pietropaolo, G. Gorini, G. Festa, **C. Andreani**, M. P. De Pascale, E. Reali, F. Grazzi, E. M. Schooneveld
 "A silicon photomultipliers readout for time of flight neutron spectroscopy with γ-ray detectors"
Review of Scientific Instrument, **80**, 095108 (2009)

118. E. Perelli Cippo, G. Gorini, M Tardocchi; R. Cattaneo, N. J. Rhodes, E. M.Schooneveld, T. Nakamura, P. Radaelli, W. A. Kockelmann, A. Pietropaolo, C. Andreani
 "Simulations and design of detectors for imaging with epithermal neutrons"
Meas. Sci. Technol. **19**, 034027, (2008)

117. Z.S. Kasztovszky, T. Belgya, Z. Kis, W. A. Kockelmann, S. Imberti, G. Festa, A. Filabozzi, C. Andreani, A. Kirfel, K. T. Biro, K. Duks, Z. S. Hajnal, P. Kudejova, M. Tardocchi
 "Prompt gamma activation analysis and time of flight neutron diffraction on 'black boxes' in the 'Ancient Charm' project"
Journal of Radioanalytical and Nuclear Chemistry, **278**, No. 3, 661–664 (2008), DOI: 10.1007/s10967-008-1405-0

116. T. Belgya, Z. Kis, L. Szentmiklósi, Z. S. Kasztovszky, G. Festa, L. Andreanelli, M. P. De Pascale, A. Pietropaolo, P. Kudejova, R. Schulze, T. Materna, , C. Andreani
 "A new PGAI-NT setup at the NIPS facility of the Budapest Research Reactor"
Journal of Radioanalytical and Nuclear Chemistry, **278**, 713–718 (2008), DOI: 10.1007/s10967-008-1510-0

115. T. Belgya, Z. Kis, L. Szentmiklósi, P. Kudejova, R. Schulze, T. Materna, G. Festa, P. A. Caroppi, C. Andreani
 "First elemental imaging experiment on a combined PGAI and NT set up at the Budapest Research Reactor"
Journal of Radioanalytical and Nuclear Chemistry, **278**, No. 3, 751-754 (2008), DOI: 10.1007/s10967-008-1605-7

114. G. Festa, C. Andreani et al. and the Ancient Charm Collaboration
 (Components of Ancient Charm Collaboration are listed at pag 55 and 56 of the paper "G. Gorini, for the Ancient Charm collaboration - Ancient Charm: A research project for neutron-based investigation of cultural-heritage objects" *Nuovo Cimento*, 30, N. 1, 47-58, DOI 10.1393/ncc/i2006-10035-9, Gennaio-Febbraio 2007.)
 "Study of archaeological samples via neutron techniques"
Nuovo Cimento B **122**, Issue 6, 785-794 (2008)

113. G. Cellere, S. Gerardi, M. Bagatin, A. Paccagnella, A. Visconti, M. Bonanomi, S. Beltrami, P. Roche, G. Gasiot, R. Harboe Sorensen, A. Virtanen, C. Frost, P. Fuochi, C. Andreani, G. Gorini, A. Pietropaolo, S. Platt
 "Neutron-induced soft errors in advanced Flash memories"

IEEE ELECTRON DEVICE LETTERS, p. 1-4, ISSN:0741-3106,
doi:10.1109/IEDM.2008.4796693
IEDM 2008. IEEE International ISSN: 8164-2284 ISBN: 978-1-4244-
2377-4

112. R. Senesi , A. Pietropaolo, C. Andreani
[“Constant- \$q\$ data representation in Neutron Compton scattering on the VESUVIO spectrometer”](#)
Nuclear Instruments and Methods in Physics Research A **594** 244–252, (2008)
111. C. Andreani, A. Pietropaolo, A. Salsano, G. Gorini, M. Tardocchi, A. Paccagnella, S. C. D. Frost, S. Ansell, S. P. Platt
[“Facility for fast neutron irradiation tests of electronics at the ISIS spallation neutron source”](#)
Applied Physics Letters, **92**, 114101 (2008)
110. Enrico Perelli Cippo, Giuseppe Gorini, Marco Tardocchi, Antonino Pietropaolo, Carla Andreani, Roberto Senesi, Nigel J Rhodes, Erik M Schooneveld
[“The Very Low Angle Detector for High-energy Inelastic Neutron Scattering on the VESUVIO spectrometer”](#)
Nuclear Inst. and Methods in Physics Research, A **589**, 296–303 (2008)
109. E. Perelli Cippo, G. Gorini, M. Tardocchi, C. Andreani, A. Pietropaolo, R. Senesi, N. Rhodes, E. Schoonveld
[“Advances on detectors for low-angle scattering of epithermal neutrons”](#)
Meas. Sci. Technol. **19** 047001, (2008)
108. C. Pantalei, A. Pietropaolo, R. Senesi, C. Andreani, S. Imberti, J. Mayers, C. Burnham, and G. Reiter
[“Proton momentum distribution of liquid water from room temperature to the supercritical phase”](#)
Phys Rev. Letters **100**, 177801 (2008), selected for Virtual Journal of Biological Physics Research **15**, issue 10 (2008)
107. A. Pietropaolo, R. Senesi, C. Andreani, A. Botti, M. A. Ricci, F. Bruni
[“Excess of proton mean kinetic energy in supercooled water”](#)
Phys Rev. Letters, **100**, 127802 (2008)
106. G. Festa, P. A. Caroppi, A. Filabozzi, C. Andreani, M. L. Arancio, R. Triolo, F. Lo Celso, V. Benfante, S. Imberti
[“Composition and corrosion phases of Etruscan Bronzes from Villanovan Age”](#)

- Meas. Sci. Technol.* **19**, 034004, (2008)
105. A. Botti, F. Bruni, M. A. Ricci, A. Pietropaolo, R. Senesi, **C. Andreani**
[“Structure and Single Proton Dynamics of Bulk Supercooled Water”](#),
Journal of Molecular Liquids **136**, 236–240 (2007)
 104. G. Gorini, for the Ancient Charm collaboration (**C. Andreani** components
of Ancient Charm Collaboration. The all members are listed ar pag 55 and
56 of this paper)
“Ancient Charm: A research project for neutron-based investigation
of cultural-heritage objects”
Il Nuovo Cimento C, **30**, N. 1, 47-58, DOI 10.1393/ncc/i2006-10035-9,
Gennaio-Febbraio 2007.
 103. V. Garbuio, **C. Andreani**, S. Imberti, A. Pietropaolo, G. F. Reiter, R.
Senesi, M. A. Ricci
[“Proton quantum coherence observed in water confined in silica
nanopores”](#)
J. Chem. Phys. **127**, 154501 (2007), selected for Virtual Journal of
Nanoscale Science and Technology **16**, issue 18 (2007).
 102. **C. Andreani**, C. Pantalei, R. Senesi
[“⁴He adsorbed in cylindrical silica nanopores: Effect of size on the
single-atom mean kinetic energy”](#)
Phys. Review B **75**, 064515-1 064515-7, (2007)
 101. M. Violante, L. Sterpone, A. Manuzzato, S. Gerardin, P. Rech, M.
Bagatin, A. Paccagnella, **C. Andreani**, G. Gorini, A. Pietropaolo, G.
Cardarilli, S. Pontarelli, C. Frost
[“A new Hardware/Software Platform and a New 1/E Neutron
Source for Soft Error Studies: Testing FPGAs at the ISIS Facility”](#),
IEEE Trans. On Nuclear Science **54**, 1184-1189 (2007)
 100. A. Pietropaolo, **C. Andreani**, A. Filabozzi, E. Pace, R. Senesi,
[“Resolution function in deep inelastic neutron scattering using the
Foil Cycling Technique”](#)
*Nuclear Instruments and Methods in Physics Research Section A:
Accelerators, Spectrometers, Detectors and Associated Equipment*, **570**,
498-510, (2007)
 99. E. M. Schooneveld, J. Mayers , N. J. Rhodes, A. Pietropaolo, **C. Andreani**,
R. Senesi, G. Gorini, E. Perelli-Cippo, M. Tardocchi
“Foil Cycling Techinque for the VESUVIO spectrometer operating in
the Resonance Detector Configuration”
Review of Scientific Instruments **77**, 095103 (2006)

98. E. Perelli-Cippo, G. Gorini, M. Tardocchi, **C. Andreani**, A. Pietropaolo, J. Mayers, N. J. Rhodes, R. Senesi, N. Rhodes, E. M. Schooneveld
 "The O-H stretching band in ice Ih derived via eV neutron spectroscopy on VESUVIO using the new very low angle detector bank"
Appl. Phys. A : Materials Science & Processing, **83**, 453-460 (2006)
97. A. Filabozzi, A. Pietropaolo, **C. Andreani**, M. P. De Pascale, G. Gorini, W. Kockelmann, L.C. Chapon,
 "Non invasive neutron diffraction analyses of marbles from the "Edificio con Tre Esedre" in Villa Adriana"
Nuovo Cimento, C, **29**, 237-252 (2006).
96. M. Tardocchi, A. Pietropaolo, **C. Andreani**, G. Gorini, S. Imberti, E. Perelli-Cippo, R. Senesi, N. Rhodes, E. M. Schooneveld
 "Comparison of Cadmium-Zinc-Telluride semiconductor and Yttrium-Aluminum-Perovskite scintillator as photon detectors for epithermal neutron spectroscopy"
Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, **567**, 337-340, (2006)
95. **C. Andreani**, C. Pantalei and R. Senesi
 "Mean kinetic energy of helium atoms in fluid ^3He and ^3He - ^4He mixtures"
Journal of Physics Condensed Matter, **18**, 5587 (2006).
94. E. Perelli-Cippo, **C. Andreani**, M. Casalboni, S. Dire, D. Fernandez-Canoto, G. Gorini, S. Imberti, A. Pietropaolo, P. Proposito, S. Schutzmann, R. Senesi, M. Tardocchi.
 "Investigation of High Energy Inelastic Neutron Scattering from liquid water confined in silica xerogel"
Physica B: Condensed Matter **385** 1095-1097 (2006)
93. A. Pietropaolo, **C. Andreani**, A. Filabozzi, R. Senesi G. Gorini, E. Perelli Cippo, M. Tardocchi, N. J. Rhodes and E. M. Schooneveld
 "DINS measurements on VESUVIO in the Resonant Detector configuration: proton mean kinetic energy of water"
Journal of Instrumentation JINST 1 P04001 doi:10.1088/1748-0221/1/04/P04001 JINST, March (2006)
92. A. Filabozzi, **C. Andreani**, M.P. De Pascale, G. Gorini, A. Pietropaolo, E. Perelli Cippo, R. Senesi, M. Tardocchi and W. Kockelmann

- "Texture and structure studies on marbles from Villa Adriana via neutron diffraction technique"
Journal of Neutron Research, **14**, 55-58 (2006)
91. M. Tardocchi, C. Andreani, O. Cremonesi, G. Gorini, E. Perelli-Cippo, A. Pietropaolo, N. Rhodes, E. Schooneveld, R. Senesi
 "Development of the Very Low Angle Detector (VLAD) for detection of epithermal neutrons at low momentum transfers"
Nuclear Physics B, **150**, 421-425 (2006).
 90. M. Tardocchi, , G. Gorini, E. Perelli-Cippo, C. Andreani, S. Imberti, A. Pietropaolo, R. Senesi, N. Rhodes, E. M. Schooneveld
 "VLAD for epithermal neutron scattering experiments at large energy transfers"
Journal of Physics **41**, 451 (2006).
 89. S. Imberti, C. Andreani, V. Garbuio, G. Gorini, A. Pietropaolo, R. Senesi, M. Tardocchi
 "Resolution function in High energy Inelastic Neutron Scattering on the VESUVIO spectrometer"
Nuclear Instruments and Methods A **552**, 463-476 (2005)
 88. E. Perelli-Cippo, G. Gorini, M. Tardocchi, O. Cremonesi, C. Andreani, A. Pietropaolo, R. Senesi, Z.A. Bowden, N. J. Rhodes and E. M. Schooneveld
 "Development of the Very Low Angle Detector for epithermal neutron scattering at low momentum transfers"
IEEE Transactions on Nuclear Science, **52**, N. 4, 1092-1097, (2005)
 87. C. Andreani, D. Colognesi, J. Mayers, G. Reiter, R. Senesi
 "Measurement of momentum distribution of light atoms and molecules in condensed matter systems using inelastic neutron scattering"
Advances in Physics, **54**, 377 (2005)
 86. A. Filabozzi, M. T. Di Bari, A. Deriu, A. Di Venere, C. Andreani, N. Rosato
 "Pressure dependence of protein dynamics by elastic and quasi elastic neutron scattering"
J. Physics: Condensed Matter, **17**, S3101-S3109, (2005)
 85. M. Tardocchi, G. Gorini, A. Pietropaolo, C. Andreani, R. Senesi, N. Rhodes, E. M. Schooneveld
 "YAP scintillators for resonant detection of epithermal neutrons at pulsed neutron sources"
Review of Scientific Instrument **75**, 4880-4890, (2004)

84. M. Tardocchi, A. Pietropaolo, **C. Andreani**, G. Gorini, E. Perelli-Cippo, N.J. Rhodes, E.M. Schooneveld, R. Senesi
 "Development of new instrumentation for epithermal neutron scattering at very low angles"
Nuclear Instruments and Methods A **535**, 121–125, (2004)
83. **C. Andreani**, A. Pietropaolo, R. Senesi, G. Gorini, E. Perelli-Cippo, M. Tardocchi, N. Rhodes, E. M. Schooneveld,
 "A resonant detector for high-energy inelastic neutron scattering experiments"
Appl. Physics Letters, **85**, 5454-7, (2004)
82. G. Gorini, E. Perelli-Cippo, M. Tardocchi, **C. Andreani**, A. D'Angelo, A. Pietropaolo, R. Senesi, S. Imberti, A. Bracco, E. Previtali, G. Pessina, N. J. Rhodes, E. M. Schooneveld
 "The resonant detector and its application to epithermal neutron spectroscopy"
Nuclear Instruments and Methods A **529**, 293-300 (2004)
81. M. Tardocchi, A. Pietropaolo, R. Senesi, **C. Andreani**, G. Gorini
 "Development of resonant detectors for epithermal neutron spectroscopy at pulsed neutron sources"
Nuclear Inst. Methods A **518**, 259-260 (2004)
80. M. Tardocchi, C. Arnaboldi, G. Gorini, S. Imberti, G. Pessina, E. Previtali, **C. Andreani**, A. Pietropaolo, R. Senesi
 "Assessment of a silicon detector for pulsed neutron scattering Experiments"
Physica B **350**, 853-856 (2004)
79. J. Mayers, J. Tomkinson, T. Abdul-Redah, W.G. Stirling, **C. Andreani**, R. Senesi, M. Nardone, D. Colognesi, E. Degiorgi
 "VESUVIO - the double difference inverse geometry spectrometer at ISIS"
Physica B **350**, 659-662 (2004)
78. **C. Andreani**
 "Short-time single particle dynamics in quantum and molecular systems"
Physica B **350**, 231 (2004)
77. T. Abdul-Redah, **C. Andreani**, A. D'Angelo, G. Gorini, S. Imberti, J. Mayers, R. J. Newport, A. Pietropaolo, N. J. Rhodes, E. M. Schooneveld, R. Senesi, M. Tardocchi, J. Tomkinson

- "Recent developments of the e.VERDI Project at ISIS"
Physica B **350**, 837 (2004)
76. A. Pietropaolo, R. Senesi, M. Tardocchi, **C. Andreani**, G. Gorini
"Photon detectors for epithermal neutron scattering at high- ω and low- q ".
Physica B **350**, 857-859 (2004)
 75. M. Tardocchi, A. Pietropaolo **C. Andreani**, A. Bracco, A. D'Angelo, G. Gorini, S. Imberti, N. Rhodes, R. Senesi, E. M. Schooneveld
"Cadmium-Zinc-Telluride photon detector for epithermal neutron spectroscopy: pulse height response characterization"
Nuclear Inst. Methods A **526**, 477-492 (2004)
 74. **C. Andreani**, A. D'Angelo, G. Gorini, S. Imberti, A. Pietropaolo, N. J. Rhodes, E. M. Schooneveld, R. Senesi, M. Tardocchi
"CdZnTe γ detector for Deep Inelastic Neutron Scattering on the VESUVIO spectrometer"
Appl. Phys. A: Materials Science & Processing **78**, 903-913 (2004)
 73. R. Senesi, **C. Andreani**, A. L. Fielding, J. Mayers, W. G. Stirling
"Kinetic energy of He atoms in liquid ^4He - ^3He mixtures"
Phys. Rev. B **68**, 214522 (2003)
 72. D. Colognesi, **C. Andreani**, E. Degiorgi
"Phonon Density of States from a Crystal Analyzer Inverse-Geometry Spectrometer: a study on ordered solid Hydrogen Sulphide and Hydrogen Chloride"
Journal of Neutron Research, **11** (3), 123-143 (2003)
 71. **C. Andreani**, D. Colognesi, E. Degiorgi, A. Filabozzi, M. Nardone, E. Pace, A. Pietropaolo and R. Senesi
"Double difference method in Deep Inelastic Neutron Scattering on the VESUVIO spectrometer"
Nucl. Inst. Meth. A **497**, 535-549 (2003)
 70. A. Pietropaolo, **C. Andreani**, A. D'Angelo, R. Senesi, G. Gorini, S. Imberti, M. Tardocchi, N. Rhodes, E. M. Schooneveld,
" γ detectors for Deep Inelastic neutron scattering in the 1 eV-100 eV region"
Appl. Phys. A: Materials Science & Processing **74**, [Suppl.], S189-S190 (2002)
 69. R. Senesi, **C. Andreani**, D. Colognesi,

- "Momentum distribution of liquid ^3He : simulation of Deep Inelastic Neutron Scattering experiments with the VESUVIO spectrometer"
J. of Low Temperature Physics, **126**, 57-62, (2002)
68. **C. Andreani**, A. Pietropaolo, R. Senesi, G. Gorini, M. Tardocchi, A. Bracco, N. Rhodes, E. Schooneveld
"Electron-volt spectroscopy at a pulsed neutron source using a resonance detector technique"
Nuclear Instrument and Methods **A481**, 509-520, (2002)
 67. **C. Andreani**, D. Colognesi, E. Degiorgi, M. A. Ricci
"Proton Dynamics in supercritical water"
J. Chem. Phys. **115**, 11243-11248, (2001).
 66. R. Senesi, **C. Andreani**, D. Colognesi, A. Cunsolo, M. Nardone
"Deep Inelastic Neutron Scattering determination of the single particle kinetic energy in solid and liquid ^3He "
Phys. Rev. Letts **86**, 4584-4587, (2001)
 65. **C. Andreani**, E. Degiorgi and R. Senesi, F. Cillico, D. Colognesi, J. Mayers, M. Nardone, E. Pace
"Single particle dynamics in fluid and solid hydrogen sulphide: an inelastic neutron scattering study"
J. Chem. Phys. **114**, 387-398 (2001)
 64. M. Di Bari, A. Deriu, A. Filabozzi, **C. Andreani**, A. Di Venere, N. Rosato
"Dynamics of trypsin under pressure"
Physica B, **276-278**, 510-511 (2000)
 63. R. Senesi, **C. Andreani**, Z. Bowden, D. Colognesi, E. Degiorgi, A. L. Fielding, J. Mayers, M. Nardone, J. Norris, M. Praitano, N. J. Rhodes, W. G. Stirling, J. Tomkinson, and C. Uden
"VESUVIO: a novel instrument for performing spectroscopic studies in condensed matter with eV neutrons at the ISIS Facility"
Physica B **276-278**, 200-201 (2000)
 62. **C. Andreani**, P. Cipriani, D. Colognesi, E. Pace
"Single particle dynamics in fluid hydrogen and deuterium"
J. Phys.: Condensed Matter **12** A139-A145 (2000)
 61. D. Colognesi, **C. Andreani**, R. Senesi
"Single particle mean kinetic energy in low density supercritical ^3He "
Europhysics Letters **50**, 202-208 (2000)
 60. **C. Andreani**, D. Colognesi and E. Pace

"Deep Inelastic Neutron Scattering from fluid and solid H₂ and D₂"
Scientific Review in: *Neutron News*, **11**, n. 1, 21-25, (2000)

59. **C. Andreani**, D. Colognesi, E. Pace
"Deep Inelastic neutron Scattering from fluid hydrogen and deuterium: from vibrational excitations to the impulse approximation"
Phys. Rev B **60** 10008-10021 (1999)
58. **C. Andreani**
"Orientational Correlations in liquid hydrogen halides: the special case of HCl"
J. Molecular Liquids **78** 217-233 (1998)
57. S. F. Parker, C. J. Carlile, T. Pike, J. Tomkinson, R. J. Newport, **C. Andreani**, F. P. Ricci, F. Sacchetti, M. Zoppi
"TOSCA: a world class inelastic neutron spectrometer"
Physica B **241** 154-156 (1998)
56. M. A. Ricci, M. Nardone, A. Fontana, **C. Andreani** and W. Hahn
"Light and neutron scattering studies of the OH stretching band in liquid and supercritical water"
J. Chemical Physics **108**, 450-454 (1998)
55. **C. Andreani**, D. Colognesi, A. Filabozzi, E. Pace, M. Zoppi
"Deep inelastic neutron scattering from fluid para- and orthohydrogen"
J. Phys. C Condensed Matter **10**, 7091-7111 (1998)
54. J. Mayers, **C. Andreani**, D. Colognesi
"Measurements of the kinetic energy in ⁴He through the superfluid transition by very high energy neutron scattering"
J. Physics- Condensed Matter **9**, 10639-10649 (1997)
53. **C. Andreani**, M. A. Ricci, M. Nardone, F. P. Ricci, and A. K. Soper
"Orientational correlations and hydrogen bonding in liquid hydrogen chloride"
J. Chemical Physics **107**, 214-221 (1997)
52. **C. Andreani**, D. Colognesi, A. Filabozzi, M. Nardone, R. Azuah
"Temperature dependence of the molecular kinetic energy in dense fluid para-hydrogen"
Europhysics Letters **37**, 329-334 (1997)
51. **C. Andreani**, D. Colognesi, A. Filabozzi, M. Nardone, E. Pace

- "Atomic and molecular momentum distributions in quantum fluids by Neutron Compton Scattering"
Physica B, **234** 329-330 (1997)
50. *C. Andreani, D. Colognesi, A. Filabozzi, M. Nardone*
 "Temperature dependence of single particle kinetic energy in liquid para-hydrogen"
Physica B, **234** 334-336 (1997)
 49. *C. Andreani, A. Deriu, A. Filabozzi, D. Russo*
 "Low frequency dynamics of enzyme Superoxide Dismutase revealed by inelastic neutron scattering"
Physica B, **234** 223-224 (1997)
 48. *C. Andreani, A. Filabozzi and A. Deriu*
 "Inelastic and quasi-elastic dynamics in Superoxide Dismutase"
Biological Macromolecular Dynamics- Eds. S. Cusack, H. Buttner, M. Ferrand, P. Langan, P. Timmins, Adeline Press pag. 129-133 (1997)
 47. *C. Andreani, A. Filabozzi, E. Pace, J. Mayers*
 "Model-independent analysis of inelastic neutron scattering data at high momentum transfer"
Phys.Rev. B **54**, 6255-6262 (1996)
 46. *A. Filabozzi, A. Deriu and C. Andreani*
 "Temperature dependence of the dynamics of Superoxide Dismutase by quasi-elastic neutron scattering"
Physica B, Condensed Matter **226**, 56-60 (1996)
 45. *M. A. Ricci, M. Nardone, F. P. Ricci, C. Andreani and A. K. Soper*
 "Microscopic structure of low temperature liquid ammonia: a neutron diffraction experiment"
J. Chemical Physics **102**, 7650-7655 (1995)
 44. *C. Andreani, A. Filabozzi, F. Menzinger, S. Desideri, A. Deriu, A. Di Cola,*
 "Dynamics of Hydrogen Atoms in Superoxide Dismutase by Quasi-elastic neutron Scattering"
Biophys. Journal **68**, 2519-2523 (1995)
 43. *C. Andreani, A. Filabozzi, E. Pace*
 "Deep inelastic neutron scattering off D₂ and H₂ and momentum distributions of nuclei in diatomic molecules"
Phys Rev B **51**, 8854-8863 (1995)

42. *C. Andreani, D. Colognesi, A. Filabozzi, F. Menzinger*
"An X-ray diffraction study of liquid Chlorine"
Molecular Physics **82**, 1181-1186 (1994)
41. *C. Andreani, A. Filabozzi, M. Nardone, F. P. Ricci and J. Mayers*
"Quantum and classical behaviour of the single particle dynamics in dense liquid ^4He "
Phys. Rev. B **50**, 12744-12746 (1994)
40. *C. Andreani, F. Menzinger, M. A. Ricci, A. K. Soper and J. Dreyer*
"Neutron diffraction from liquid Hydrogen Bromide: study of the orientational correlations"
Phys. Rev B, **49**, 3811-3820 (1994)
39. *C. Andreani, F. Menzinger, M. Nardone, F. P. Ricci, M.A. Ricci and A.K. Soper*
"Are hydrogen bonds present in hydrogen halides liquids other than HF?"
"Hydrogen Bond Networks" ed. by M.C. Bellisent-Funel and J.C. Dore
NATO ASI Serie C: Mathematical and Physical Sciences-Vol 435
Kluwer Academic Publisher (1994), pag 113-118
38. *C. Andreani, M. Nardone, F. P. Ricci and A. K. Soper*
"Partial structure factors and orientational correlations in liquid HI"
in *Methods in the Determination of Partial Structure Factors*, Ed. by J. B. Suck, P. Chieux, D. Raoux and C. Riekel, World Scientific Publishing (1993), pag 64 -69
37. *A. K. Soper, C. Andreani and M. Nardone*
"Reconstruction of the orientational pair correlation function from neutron diffraction data: the case of liquid hydrogen iodide"
Phys. Rev. E **47**, 2598-2605 (1993)
36. *C. Andreani, M. Nardone, F. P. Ricci and A. K. Soper*
"Neutron diffraction study of liquid hydrogen iodide"
Phys Rev A **46**, 4709-4716 (1992)
35. *C. Andreani, V. Merlo, E. Pace and P. Postorino*
"Asymptotic behaviour of the scaling function in deep inelastic neutron scattering"
Physics Letters A **171**, 76-80 (1992)
34. *C. Andreani, M. C. Bellisent-Funel, F. P. Ricci, M. A. Ricci*
"Orientational correlations in liquid Iodine"
Recent developments in the Physics of Fluids **F277**, 10 (1991)

33. *C. Andreani, M. C. Bellisent-Funel, F. P. Ricci, M. A. Ricci*
"Neutron diffraction study of liquid Iodine"
Phys Rev A **44**, 5018-5024 (1991)
32. *C. Andreani, U. Buontempo, J. Mayers, F. P. Ricci*
"Energy resolved neutron radiography"
Physica B **174** 572-576 (1991)
31. *C. Andreani, V. Merlo, P. Postorino, M. A. Ricci*
"Vibrational density of states of the hydrogen sites in hydrogen bonded molecular solids"
Journal Molecular Structure **250**, 385-393 (1991)
30. *C. Andreani, V. Merlo, M. A. Ricci, A. K. Soper*
"Neutron diffraction study of the partial pair correlation functions of liquid hydrogen sulphide"
Molecular Physics **73**, 407-415 (1991)
29. *C. Andreani, J. Mayers, P. Postorino, M. A. Ricci*
"Stretching density of states of the deuterium sites in polycrystalline D₂O"
Molecular Physics **73**, 737-743 (1991)
28. *C. Andreani, J. Dore, F. P. Ricci*
["Structural characterization of diatomic liquids by diffraction studies"](#)
Reports on Progress in Physics **54**, 731-788 (1991)
27. *C. Andreani, V. Merlo, M. A. Ricci, D. Lepoire*
"On the multiple scattering corrections in a neutron incoherent inelastic scattering experiment"
Nuclear Instruments and Methods **B61**, 123-126 (1991)
26. *C. Andreani, U. Buontempo, J. Mayers, F.P. Ricci*
"A new experimental method for phase diagram determinations by neutron absorption spectroscopy"
Nuclear Instrument and Methods B **52**, 199-205 (1990)
25. *C. Andreani, P. Bisanti, C. Petrillo, F. Sacchetti, B. C. Boland, Z. A. Bowden, A.D. Taylor*
"Density of vibrational states in hydrogen bonded crystals. Potassium dihydrogen phosphate"
Molecular Physics **68**, 681-686 (1990)

24. *C. Andreani, U. Steigenberger, C. G. Windsor*
["PRISMA - A unique phonon spectrometer"](#)
Europhysics News **21**, 147 (1990)
23. *C. Andreani, G. Baciocco, J. Mayers*
 "Initial state effects in Deep Inelastic Neutron Scattering"
 in *Momentum Distributions* edited by R.Silver and P.Sokol -
 PLENUM Publishing Corporation (1989), pag. 355-359
22. *C. Andreani, G. Baciocco, R. Holt, J. Mayers*
 "Resolution in Deep Inelastic Neutron Scattering using pulsed
 neutron sources ", In *Momentum Distributions* ed. by R.Silver and
 P.Sokol - PLENUM Publishing Corporation (1989), pag 333
21. *C. Andreani, V. Merlo, M.A. Ricci, G. C. Ruocco, A. K. Soper*
 "Diffraction studies of liquid deuterium sulphide"
Europhysics Letters **8(5)**, 441 (1989)
20. *C. Andreani, G. Baciocco, R. Holt, J. Mayers*
 "Resolution in deep inelastic neutron scattering using pulsed
 neutron sources"
Nuclear Instruments and Methods **A276**, 297-305 (1989)
19. *J. Mayers, C. Andreani, G. Baciocco*
 "Initial state effects in deep inelastic neutron scattering"
Physical Review B **39**, 2022-2028 (1989)
18. *C. Andreani, V. Merlo, M. A. Ricci*
 "A Procedure for multiple scattering corrections in a neutron
 incoherent inelastic scattering experiment"
Nuclear Instruments and Methods **B36**, 216-221 (1989)
17. *C. Andreani, V. Merlo, M. A. Ricci, B. C. Boland*
 "Vibrational density states in polycrystalline sulphuric acid"
Molecular Physics **66**, 747- 755 (1989)
16. *C. Andreani, C. Petrillo, D. Rocca*
 "X-ray diffraction structure of liquid hydrogen sulphide"
Europhysics Letters **5**, 145-149 (1988).
15. *C. Andreani, C. Petrillo*
 "Neutron and X-ray diffraction patterns of aqueous sulphuric acid
 solutions"
Molecular Physics **62**, 765-773 (1987)

14. **C. Andreani**, C. J. Carlile, F. Cilloco, C. Petrillo, F. Sacchetti, G. C. Stirling, C. G. Windsor
"PRISMA-a spectrometer for the measurement of coherent excitations on a pulsed spallation neutron source"
Nuclear Instrument and Methods **A254**, 333-341 (1987).
13. **C. Andreani**, G. Mazzone, F. Sacchetti
"Electronic structure of FCC Fe-Mn alloys. I. Charge-density measurements"
Journal of Physics F **17**, 1419-1423 (1987)
12. J. M. F. Gunn, **C. Andreani**, J. Mayers
"A new approach to impulsive neutron scattering"
Journal of Physics C: Solid State Physics **19**, L835- L840 (1986)
11. **C. Andreani**, C. Petrillo, F. Sacchetti
"The structure of liquid sulfuric acid"
Molecular Physics **58**, 299-306 (1986)
10. **C. Andreani**, F. Cilloco, E. K. Osae
"Neutron diffraction study of liquid fluorine at 77K"
Molecular Physics **57**, 931 (1986)
9. **C. Andreani**, F. Cilloco, L. Nencini, D. Rocca, R. N. Sinclair
"The structure of liquid bromine"
Molecular Physics **55**, 887-899 (1985)
8. **C. Andreani**, P. Bosi, F. Sacchetti, C. K. Loong
"Absolute measurements of the stretching mode density of states in polycrystalline ice Ih"
Journal of Chemical Physics **83**, 750-753 (1985)
7. A. J. Allen, M. T. Hutchings, C. G. Windsor, **C. Andreani**
["Neutron diffraction methods for the study of residual stress fields"](#)
Advances in Physics **34**, 445-473 (1985)
6. **C. Andreani**, B. C. Boland, F. Sacchetti, C. G. Windsor
"Incoherent neutron scattering on polycrystalline ice Ih"
Journal of Physics C: Solid State Physics **16**, L513-L516 (1983)
5. **C. Andreani**, P. Bosi, E. Mazzega, F. Sacchetti, C. G. Windsor
"Observations of the dispersion relation of the O-D stretching modes in heavy ice Ih"
Journal of Physics C: Solid State Physics **16**, 3055-3060 (1983)

4. **C. Andreani, P. Morales, D. Rocca**
"Vibrational dephasing in liquid hydrogen chloride"
Molecular Physics **48**, 593- 597 (1983)
3. **A. Allen, C. Andreani, M. T. Hutchings, C. G. Windsor**
"Measurement of internal stress within bulk materials using neutron diffraction"
Non Destructive Texture International, **14**, 249-254, Elsevier (1981)
2. **C. Andreani, P. Morales, D. Rocca**
"On the dynamical properties of liquid hydrogen chloride: a light scattering experiment"
Molecular Physics **44**, 445- 457 (1981)
1. **P. Morales, C. Andreani**
"Light scattering from hydrogen and deuterium halides"
Physics Letters A **74A**, 335-336 (1979)

2. LIBRI

CA Ha contribuito a 20 libri di proceedings di conferenze internazionali, a 4 special issues su riviste internazionali e 3 nazionali. Selezione:

1. **C. Andreani, R. Senesi, M. Krzystyniak, G. Romanelliz and F. Fernandez-Alonso**
"Atomic Quantum Dynamics in Materials Research"
Pages 403-457 (2017), in [Experimental Methods in the Physical Sciences](#), Volume 49, Editors F. Fernandez-Alonso and David Price (2017).
2. **Giulia Festa, Nikolay Kardjilov and Carla Andreani**
"Probing Our Heritage with Neutrons — One Successful Story"
Pag 3 in Neutron Methods for Archaeology and Cultural Heritage, SPECIAL ISSUE, Springer International Publishing, Nikolay Kardjilov and Giulia Festa, Editors ISBN 978-3-319-33163-8 (2017)
3. **C. Andreani, G. Festa, A. Lapi, A. Miceli, R. Senesi**
Problemi di fisica generale. Aracne editore (2016)
4. **C. Andreani, G. Festa, A. Lapi, A. Miceli, R. Senesi**
'Problemi di fisica generale'
TexMat editore (2015)
5. **C. Andreani, G. Festa, A. Lapi, R. Senesi**

'Quesiti e soluzioni di fisica generale'

ROMA: Exòrma Edizioni, ISBN: 978-88-95688-51-0 (2010)

6. **C. Andreani**, G. Gorini, T. Materna
'Novel Neutron Imaging Techniques for Cultural Heritage Objects'
pags 229-252, Book Title: "Neutrons Imaging and Applications"
Editor name(s): Anderson, Ian S.; McGreevy, Robert; Bilheux,
Hassina Z. SPECIAL Springer (2009)

3. COMUNICAZIONI SU INVITO A CONVEGNI E SCUOLE (Selezione)

95. **Carla Andreani**
"I Neutroni incontrano l'Arte"
Comunicazione su invito al Rotary 28 Giugno 2017
94. **Carla Andreani**
"I Neutroni incontrano l'Arte"
Comunicazione su invito al "Internazionale Science Communication and Science Museums: Prospects and New Ideas", 18-19 Maggio 2017
93. **Carla Andreani**
"I Neutroni incontrano l'Arte"
Comunicazione su invito
Convegno "Nuova Scienza dalle frontiere della Fisica",
[Seminario nell'ambito delle celebrazioni per il Cinquantenario dell'UGIS](#)
Piacenza 26 Novembre 2016
92. **Carla Andreani**
"Photon energy resolved Neutron Resonance Capture Analysis and neutron energy resolved Prompt Gamma Activation Analysis for enhanced isotope identification using eV neutrons"
Comunicazione su invito
HBS Workshop, Unkel (Germany) 29-30 September 2016
91. **Carla Andreani**
"I neutroni per illuminare il nostro passato e il nostro presente"
Comunicazione su invito, XIII International Symposium of Universities "Knowledge and Mercy" Rome 7th -11th September 2016

91. *Carla Andreani*
 “DINS to probe nuclear quantum effects”
Comunicazione su invito al Workshop “Water and Water Systems”
 22 July – 31 July 2016, Erice (Italy)

90. *Carla Andreani*
 “Neutron probe to illuminate the past”
Comunicazione su invito, LENS Firenze 14 Giugno 2016

89. *Carla Andreani*
 “Quali opportunità per le università italiane in Horizon 2020”
Comunicazione su invito alla “Conferenza di Ateneo, UniSalento
 Ricerca, 11 Dicembre 2015

88. *Carla Andreani*
 I-UK Interdisciplinary Initiative on Dementia (2ID),
Comunicazione su invito al Convegno “Italian Healthcare and
 MedTech Chain in the field of Neuroscience, Roma 11 September
 2015

87. *Carla Andreani*
 “Neutron Instrumentation at ISIS: the CNR contribution”
Comunicazione su invito al Workshop “Italy-UK partnership in
 Neutron Science: Thirty Years and Beyond”, 26/11/2015

86. *Carla Andreani*
 “Quantal Nuclear Motions in Condensed H-Bonded Systems”
Comunicazione su invito al Department of Physics & Materials
 Science
 City University of Hong Kong, Hong Kong 14 October 2015

85. *Carla Andreani*
 “eV Spectrometers”
Lezioni su invito alla XIII School on Neutron Scattering (SoNS)
 “Francesco Paolo Ricci”: “INSTRUMENTS AND DEVICES FOR
 NEUTRON SCATTERING EXPERIMENTS” 1st course of the ERICE
 School “NEUTRON SCIENCE AND INSTRUMENTATION”, 28
 July – 4 August 2015, Erice (Italy)

84. *Carla Andreani*
 “ISIS May 2015: current status and future plans”
Comunicazione su invito al *Workshop* UCANS V: The Fifth Meeting
 of The Union for Compact Accelerator-Driven Neutron Sources
 Padova, Italy 12-15 May 2015

83. *Carla Andreani*
 "Probing our heritage"
Comunicazione su invito LLB Workshop, New opportunities in Neutron Scattering Small to Medium Sources and Their Applications, Paris 14-15 May 2015
82. *Carla Andreani*
 "Quantal Nuclear Motions in Condensed H-Bonded Systems"
Comunicazione su invito a ILL, Institut Max von Laue - Paul Langevin, 19 Settembre 2014.
81. *Carla Andreani*
 "Inelastic Scattering I and Inelastic Scattering II"
Lezioni su invito alla XII School on Neutron Scattering (SoNS) "Francesco Paolo Ricci": "Introduction to the theory and techniques of neutron scattering and applications to Cultural Heritage", 30 April – 9 May 2014, Erice (Italy)
80. *Carla Andreani*
 "NEUROBIOTECH: Tor Vergata and Research Infrastructures for a cross-interdisciplinary research approach"
Comunicazione su invito a NeuroBiotech Press Conference, European Parliament, Place du Luxemburg, Bruxelles, 2nd April 2014
79. *Carla Andreani*
 "IRICH: La Infrastruttura di Ricerca Distribuita per i Beni Culturali"
Comunicazione su invito al Convegno "Europa Creativa: Il contributo dell'Università alla progettazione della nuova dimensione culturale europea
 Facoltà di Lettere e Filosofia, Aula Sabatino Moscati 14 Marzo 2014
78. *Carla Andreani*
 "Quantal Nuclear Motions in Condensed H-Bonded Systems"
Comunicazione su invito VI Workshop in Electronvolt Neutron Spectroscopy: Frontiers and Horizons, Cosener's House, Oxfordshire, UK, 20th – 21st January 2014
77. *Carla Andreani*
 "Scienza Italiana ad ISIS"
Comunicazione su invito CNR Convegno Neutroni per l'Italia: Opportunità per nuovi sviluppi della scienza con i neutroni, Aula Convegni CNR. Roma, Italia, 6 Dicembre 2013
76. *Carla Andreani*

“Accelerated Diagnostics of Soft Errors in Electronic Devices Via MeV Energy Atmospheric Neutrons”
Comunicazione su invito NanotechITALY 2013, Key Enabling Tehcnology for Responsible Innovation, 27th – 29th November 2013 Venice, Italy

75. *Carla Andreani*
 “Probing our heritage”
Comunicazione su invito Institute of Physics, Physical Society Club, 9th October 2013, London, UK

74. *Carla Andreani*
 “The quantum nature of the OH stretching mode in ice and water probed by neutron scattering experiments”
Comunicazione su Invito FisMat2013, Milan, Italy, 9th – 13th September 2013

73. *Carla Andreani*
 “Direct Measurement of Competing Quantum Effects in the Melting of Heavy Water”
Comunicazione su Invito 3rd CMCSN Workshop, University of California, Davis, 24th - 26th June 2013

72. *Carla Andreani*
 “Deep and Inelastic neutron scattering of quantum particles in ice, normal and metastable phases of water”
Comunicazione su Invito National University of Singapore, Departement of Chemistry, 3 Science Drive, Singapore 4th July 2012

71. *Carla Andreani*
 “Deep and Inelastic neutron scattering of quantum particles in ice, normal and metastable phases of water”
Comunicazione su Invito Nanyang Technological University, 21 Nanyang link, Singapore 637371, 28th June 2012

70. *C. Andreani*
 “Neutron probe and Neutron Sources”
Comunicazione su invito alla XI Edizione School Francesco Paolo Ricci” Taormina 22-26 Maggio 2012

69. *C. Andreani*
 “Introduction to Neutron Scattering”
Comunicazione su invito alla XI Edizione School Francesco Paolo Ricci” Taormina 22-26 Maggio 2012

68. *Carla Andreani*
"Proton dynamics in the the stable and metastable phases of water"
Comunicazione su Invito University College London, Chemistry Department, 2 May 2012.
67. *Carla Andreani*
"International research and training at Tor Vergata: high energy neutron scattering, neutron imaging and irradiation techniques"
Comunicazione su Invito Institute of Crystalline Materials, Shandong University, 18 Aprile 2012
66. *Carla Andreani*
"International Research and Training at Rome Tor Vergata: neutron irradiation and proton quantum dynamics"
Comunicazione su Invito Sun Yat Sen University, The School of Physics & Engineering, 16 Aprile 2012
65. *Carla Andreani*
"Research and Training at Rome Tor Vergata: the example of neutron imaging and irradiation"
Comunicazione su Invito Sino-French Institute of Nuclear Engineering and Technology, 13 Aprile 2012
64. *Carla Andreani*
"Current experimental nuclear physics and neutron scattering research activities in Rome: an overview"
Comunicazione su Invito, Physics Department of the University of Hong Kong, 12 Aprile 2012
63. *Carla Andreani*
"DINS and INS of quantum particles in ice, normal and metastable phases of water"
Comunicazione su Invito, Physics Department of the University Sapienza, 23 Marzo 2012
62. *Carla Andreani*
"Light and heavy particles quantum dynamics in water and ice"
Comunicazione su Invito, Italian Physics for European Research Infrastructures, CNR Aula Convegni, 22-23 February Rome 2012
61. *Carla Andreani*
"Deep and Inelastic neutron scattering of quantum particles in ice, normal and metastable phases of water"
Comunicazione su Invito, Computational Materials and Chemical Sciences Network (CMCSN) - Structure and Dynamics of Water and

Aqueous Solutions (SDWAS) Coordination Meeting, February 10-12, 2012 – Seattle, February 10, 2012

60. **C. Andreani**
“European distributed Research Infrastructure for Cultural Heritage: ERICH”
Comunicazione su invito, a ICT Innovation for Quality of Life and Healthy Ageing, European Parliament, Place du Luxemburg, Bruxelles, 22nd September 2011
59. **C. Andreani**
“I neutron e i beni culturali”
Comunicazione su invito, Scuola Cavalieri del Lavoro, Lamaro Pozzani 11 Aprile 2011
58. **C. Andreani**
“IRICH: Italian Research Infrastructure for Cultural Heritage”
Comunicazione su invito, DNA ITALIA: TECNICHE CULTURA PATRIMONIO DA IERI A DOMANI, Lingotto Fiere – Oval Torino, Ottobre 2010
57. **C. Andreani**
“Proton quantum effects in ice, normal and confined water”
Comunicazione su invito al High-Energy Neutrons for Science and Society, V edition Perspectives in Neutron Spectroscopy at High Energy, October 2010 Villa Wolkonsky, The Residence of The British Ambassador, Rome.
56. **C. Andreani**
“Deep Inelastic Neutron Scattering a unique tool for the investigation of proton quantum dynamics”
Comunicazione su invito alla X Edizione School Francesco Paolo Ricci” Villa Mondragone Settembre 2010 Rome.
55. **C. Andreani**
“Neutron Scattering Technology in Material and Nano-Science Research”
Comunicazione su invito, State Key Laboratory of Nuclear Physics and Technology, Beijing, China, 15th Settembre 2010
54. **C. Andreani**
“Proton momentum distribution in bulk and confined water”
Comunicazione su invito, “XVth International Workshop on Quantum Atomic and Molecular Tunneling in Solids and other Condensed Phases”, Darmstadt, Germany 5th Settembre 2010

53. **C. Andreani**
"Neutron probe to illuminate the past"
Comunicazione su invito, International Summer School in Conservation of Historical, Monumental and Archaeological Sites, Università di Roma Tor Vergata, Luglio 2010
52. **C. Andreani**
"Proton Quantum Dynamics in Water via DINS"
Comunicazione su invito, Helmholtz Zentrum Berlin für Materialien und Energie GmbH Berlin, Berlin, Germany, Marzo 2010
51. **C. Andreani**
"Proton Quantum Effects in Water"
Comunicazione su invito, ETH Zürich, Computational Science, Department of Chemistry and Applied Biosciences, 28 Gennaio 2010
50. **C. Andreani**
"Neutroni: Irraggiamento e Radiografia dei materiali"
Comunicazione su invito, Laboratori Nazionali di Legnaro, Padova, 20 Gennaio 2010
49. **C. Andreani**
"A light on the past: the neutron as a tool in archaeology"
Comunicazione su invito, Laboratori Nazionali di Legnaro, Padova 17 Novembre 2009
48. **C. Andreani**
"Proton Quantum Effects in Water"
Comunicazione su invito, Oak Ridge National Laboratory, CNMS, 8 Novembre 2009
47. **C. Andreani**
"Momentum distribution and quantum effects in liquid water"
Comunicazione su invito, International workshop: *Structure and Dynamics of Hydrogen-Bonded Systems*, ICTP Trieste 26 - 27 October 2009.
46. **C. Andreani**
"I neutroni e i Beni Culturali"
Comunicazione su invito al Rotary, Settembre 2009
45. **C. Andreani**
"Neutrons: illuminating the past"
Comunicazione su invito al Rotary, Marzo 2009

44. **C. Andreani**
"Neutron techniques applied to Cultural Heritage"
Comunicazione su invito, International Summer School in Conservation of Historical, Monumental and Archaeological Sites, Università di Roma Tor Vergata, Luglio 2009
43. **C. Andreani**
"Deep Inelastic Neutron Scattering in liquid water"
Comunicazione su invito al London Centre of Nanotechnology, 17 Dicembre 2008
42. **C. Andreani**
"Illuminating the past: neutron a tool for Cultural Heritage"
Comunicazione su invito al YICGG 2008, second edition, Research Competition 2008 Workshop "Global Governance: Growth and Innovation 2020," Rome, August 18 – 27, 2008
41. **C. Andreani**
"I neutroni, una sonda per l'indagine dei beni culturali"
Comunicazione su invito al Convegno Scienza Orienta Tor Vergata Facoltà di Scienze MM.FF.NN. Febbraio 2008
40. **C. Andreani**
"Quando i neutroni non hanno segreti"
Comunicazione su invito al Convegno Scienza orienta Tor Vergata Facoltà di Scienze MM.FF.NN. 12 Febbraio 2007
39. **C. Andreani**
"Investigation of Archaeological Artefacts using Neutron Spectroscopy with eV neutrons"
Comunicazione su invito al Workshop on Neutron and Imaging 2006 – IAN2006, 23-26th October 2006, Oak Ridge (Tennessee, USA).
38. **C. Andreani**
"Proton mean kinetic energy of water in sub- and super- critical conditions '
Comunicazione su invito Workshop Progress in Electron Volt Neutron Spectroscopy, IV edition Perspectives in Neutron Spectroscopy at High Energy, 22 October 2006, Oak Ridge (Tennessee-USA).
37. **C. Andreani**
"EURICA-EUropean Research Infrastructure for Conservation and Analysis (from RICH initiative)

Comunicazione su invito al Convegno 'Tecnologie (Digitali) e valorizzazione del Patrimonio Culturale, 19 Luglio (2006), Ex Chiesa di Santa Marta-Ministero dei Beni Culturali, Roma.

36. **C. Andreani**
"Investigation of marbles from VILLA ADRIANA via Neutron diffraction"
Comunicazione su invito al Workshop Neutron and Archaeology, 29 March 2005, Budapest, (Hungary).
35. **C. Andreani**
"Single particle dynamics in fluid ^3He , ^4He and $^3\text{He}/^4\text{He}$ liquid mixtures"
Comunicazione su invito al International Conference on Neutron Scattering, Sydney, Australia il 27/11- 2/12 2005.
34. **C. Andreani**
"High Energy Inelastic Neutron Scattering on VESUVIO"
Comunicazione su invito Workshop Progress in Electron Volt Neutron Spectroscopy, III edition Perspectives in Neutron Spectroscopy at High Energy, Santa Fe, New Mexico, USA. 24th April 2005.
33. **C. Andreani**
"Principles and methods of Neutron Spectroscopy at the eV energies: Deep and High Energy Inelastic Neutron Scattering"
Lezioni tenute in veste di docente della VII School of neutron Scattering Francesco Paolo Ricci, 21 Settembre 2 Ottobre 2004 Palau, (SS).
32. **C. Andreani**
"Short-time single particle dynamics in quantum and molecular systems"
Comunicazione su invito all'European Conference on Neutron Scattering Montpellier-Francia 2-5 Settembre 2003
31. **C. Andreani**
"Epithermal neutron scattering: present and future perspectives"
Comunicazione su invito all'ILL (Grenoble-Francia) ILL 23 Giugno 2003
30. **C. Andreani**
"Single-particle dynamics in quantum system"
Comunicazione su invito al LXXXVIII Congresso Nazionale della Societa' Italiana di Fisica, Alghero, 26 settembre - 1 ottobre 2002

29. **C. Andreani**
 "The e-VERDI Project"
Comunicazione su invito alla Neutron Round Table - Joint RTD Network - European Conference 'ESS – The European Spallation Source, the European Source of Science Bonn 16-17 Maggio 2002.

28. **C. Andreani**
 "The single particle dynamical properties of matter studied by Neutron Spectroscopy at the eV energies: VESUVIO Project"
Comunicazione su invito in occasione dell'inaugurazione dello spettrometro VESUVIO-Rutherford Appleton Laboratory (ISIS) 15 April 2002

27. **C. Andreani**
 "Dinamica di singola particella in sistemi molecolari e quantistici"
Comunicazione su invito LXXXVII Congresso Nazionale della Societa' Italiana di Fisica, 24-29 Settembre, Milano, Universita' degli Studi di Milano-Bicocca (2001).

26. **C. Andreani**
 "Dynamics in quantum system: neutron spectroscopy with eV neutrons"
Comunicazione su invito al convegno "F. P. Ricci: His legacy and future perspectives of neutron spectroscopy" Roma 26 Ottobre 2000

25. **C. Andreani**
 "Scattering anelastico in sistemi molecolari e quantistici"
Docente alla V Scuola di Spettroscopia di Neutroni F. P. Ricci, Palau (SS) 23 Settembre – 3 Ottobre 2000

24. **C. Andreani**
 " Spectroscopy with eV neutrons"
Comunicazione su invito tenuto all'Istituto ILL (Grenoble-Francia) 5 Giugno 2000.

23. **C. Andreani**
 "Neutron spectroscopy with eV neutrons"
Comunicazione su invito al 6th European Spallation Source, General Meeting 20-22 September 1999 Ancona –Italy

22. **C. Andreani**
 "Single particle dynamics in fluid hydrogen and deuterium"
Comunicazione su invito alla "European Physical Society- IV Liquid Matter Conference" Granada (Spagna) Luglio 1999

21. **C. Andreani**
 "Spettroscopia con neutroni epitermici"
Docente alla IV Scuola di Spettroscopia di Neutroni, Palau (SS) Settembre 1998

20. **C. Andreani**
 "Deep inelastic neutron scattering from fluid H₂ and D₂"
Comunicazione su invito al Congresso Nazionale INFM – Rimini Giugno 1998

19. **C. Andreani**
 VESUVIO- "A project to provide enhanced neutron scattering capability at the highest energy transfer"
Comunicazione su invito al Meeting " Neutron Scattering Instrumentation Workshop – Studsvik, Svezia 6 Ottobre 1997.

18. **C. Andreani**
 "Kinetic energy in ⁴He through the superfluid transition and Bose condensation by High Energy Neutron Scattering"
Comunicazione al Congresso Nazionale INFM Chia Laguna (Ca) 19-23 Maggio 1997.

17. **C. Andreani**
 "Inelastic and quasi-elastic dynamics in superoxide dismutase"
Comunicazione su invito al Workshop on " Inelastic and quasi-elastic Neutron scattering in Biology" ILL Grenoble France 14-15 Ottobre 1996

16. **C. Andreani**
 "Scattering anelastico e quasi-elastico nella Superossido Dismutase"
Comunicazione alla III Scuola di Diffrazione e Spettroscopia neutronica, Cala Capra, Palau (SS) 26 Settembre - 6 Ottobre 1996

15. **C. Andreani**
 "Proton momentum distributions in fluid H₂"
Comunicazione a congresso della "European Physical Society -5th General Conference of the Condensed matter Division". Aprile 22-25 1996 Baveno Stresa Italia.

14. **C. Andreani**
 The impulse approximation in molecular fluids".
Comunicazione su invito al Workshop, "The use of high energy neutrons in spectroscopy", tenutosi al Rutherford Appleton Laboratory (UK) il 4 Maggio 1995.

13. **C. Andreani**

The atomic momentum distribution of liquid deuterium: a comparison between experiment and theory".
Comunicazione alla Conferenza internazionale "2nd Liquid Matter Conference" Firenze 18-22 Settembre 1993

12. **C. Andreani**
"Is hydrogen bond present in hydrogen halides other than HF?"
Comunicazione alla Nato Advanced Research Workshop on Hydrogen Bond Networks tenutasi a Cargese, Corsica (Francia) 16-22 Agosto 1993
11. **C. Andreani**
"Deriving the asymptotic scaling function in Deep Inelastic Neutron Scattering."
Comunicazione su invito al Workshop internazionale "Highlights in the Physics of Liquids: Experimental opportunities from the Neutron and Synchrotron Radiation Sources" Trieste 19 - 29 Luglio 1993
10. **C. Andreani**
"Neutron diffraction studies of molecular liquids"
Comunicazione su invito alla "Scuola di Spettroscopia Neutronica e Raggi X" Montelibretti 12-21 ottobre 1992
9. **C. Andreani**
"The state of art in the field of microscopic structure in diatomic molecular liquids"
Comunicazione su invito al workshop internazionale " Molecular and Complex Liquids" Universita' "La Sapienza" Roma settembre 7-8 1992
8. **C. Andreani**
"Orientational Correlations in Liquid Iodine"
Comunicazione al "Symposium on the Physics of Molecular Liquids" Oxford (UK) 1-4 Aprile 1991
7. **C. Andreani**
"Hydrogen Projected vibrational density of states in hydrogenous molecular solids"
Comunicazione al Congresso "H-bond Physics" tenutasi a Il Ciocco Lucca 11-14 Settembre 1990
6. **C. Andreani**
"Le esperienze di diffrazione neutronica condotte dai gruppi italiani presso la sorgente ISIS del Rutherford Appleton Laboratory"
Comunicazione su invito al Convegno della Societa' Italiana di Spettroscopia Neutronica, SISN, tenutosi al CNR nel febbraio 1990

5. **C. Andreani**
 "Lo scattering di neutroni epitermici presso la sorgente ISIS del Rutherford Appleton Laboratory"
Comunicazione su invito al Convegno della Societa' Italiana di Spettroscopia Neutronica, SISN, tenutosi al CNR nel febbraio 1989
4. **C. Andreani**
 "Impulsive neutron scattering at ISIS"
Comunicazione al IX General conference of the Condensed Matter Division- Nice 6-9 Marzo 1989
3. **C. Andreani**
 "Deep inelastic neutron scattering from hydrogeneous solids"
Comunicazione al International Symposium: "Neutron scattering at ISIS: recent highlights in condensed matter research" - svoltosi a Villa Mondragone (Monteporzio Catone) 14-16 Dicembre 1988
2. **C. Andreani**
 "Inchoerent inelastic neutron scattering on polycrystalline ice Ih"
Comunicazione al Symposium on Neutron Scattering, Berlino Ovest (6-8 Agosto 1984)
1. **C. Andreani**
 "Measurements of internal stress within bulk materials using neutron diffraction"
Comunicazione alla II General Conference of the Condensed Matter Division of the EPS (European Physical Society), Manchester U.K. (22-25 Marzo 1982)

4. LIBRI DI CONFERENZE E PROCEEDINGS (selezione)

1. **P. Morales, C. Andreani, D. Rocca**
 "Dinamica riorentazionale di HCl in fase liquida mediante scattering della luce"
Proceedings del VI Congresso Annuale del settore di Fisica Atomica e Molecolare del GNSM - Perugia (28 Febbraio 1981).
2. **C. Andreani, P. Bosi, E. Mazzega, F. Sacchetti, C.G. Windsor**
 "Observations of the dispersion relation of the O-D stretching modes in heavy ice "
Proceedings del Conferenza "The neutron and its applications" Cambridge, (13-17 settembre 1982)
3. **A. J. Allen, C. Andreani, M. T. Hutchings, C. M. Sayers, C. G. Windsor**

- "Measurements of internal stress within bulk materials using neutron scattering"
Proceedings del Conferenza per il 50 dalla scoperta del Neutrone "The neutron and its applications" Cambridge, (13-17 settembre 1982)
4. **C. Andreani**, G. Jacucci, A. Rahman
"Lattice dynamics of a central force model for ice"
Proceedings del I Workshop Trentino di calcoli a macchina in meccanica statistica (1-28 Febbraio 1983)
 5. A. J. Allen, **C. Andreani**, M.T. Hutchings, C.M. Sayers, C.G. Windsor
"Neutron diffraction studies of texture and residual stress in weldments"
Proceedings del V Congresso Internazionale di Metallurgia e Scienza dei Materiali di Riso, Danimarca (3-7 Settembre 1984)
 6. **C. Andreani**, F. Cilloco, L. Nencini, D. Rocca
"Measurements of the liquid bromine structure factor $S(Q)$ at $T=30C$ and $T=200C$ along the coexistence curve by neutron diffraction"
Proceedings del "Annual Symposium on Neutron Scattering", Berlino Ovest (6-8 Agosto 1984)
 7. **C. Andreani**, V. Merlo, M.A. Ricci
"Vibrational density of states in polycrystalline sulphuric acid"
Proceedings del Workshop "Neutron scattering in molecular solids", Grenoble 12-15 Luglio 1988
 8. **C. Andreani**, V. Merlo, M.A. Ricci
"The structure of deuterium sulphide. A pulsed neutron scattering experiment at ISIS "
Proceedings del International Symposium: "Neutron scattering at ISIS: recent highlights in condensed matter research" - svoltosi a Villa Mondragone (Monteporzio Catone) 14-16 Dicembre 1988
 9. **C. Andreani**, G. Baciocco, R. Holt, J. Mayers
"Resolution in deep inelastic neutron scattering using pulsed sources"
Proceedings del Workshop on Momentum distributions 24-26 ottobre 1988 Argonne National Laboratory (USA)
 10. **C. Andreani**, G. Baciocco, J. Mayers
"Initial state effects in deep inelastic neutron scattering"
Proceedings del Workshop on Momentum distributions 24-26 ottobre 1988 Argonne National Laboratory (USA)

11. *C. Andreani, U. Buontempo, J. Mayers, F.P. Ricci*
 "Energy resolved neutron radiography"
Proceedings del Symposium on Neutron Scattering Bombay India (20 -25
Gennaio (1991)

12. *C. Andreani, M. Nardone, F. P. Ricci*
 "Partial Structure factors and orientational correlations in liquid HI"
Proceedings del Workshop "International workshop on the methods in
the determination of partial structure factors of disordered matter
by neutron and anomalous x-ray diffraction." Grenoble (F) 10 -11
settembre (1992)

13. *C. Andreani, A. Filabozzi, A. Deriu, D. Di Cola, F. Menzinger, A*
.Desideri
 "Internal dynamics of hydrated Cu/Zn Superoxide Dismutase"
Proceedings Congresso Nazionale di Fisica della Materia di Brescia
 (13-16 giugno 1994).

14. *C. Andreani , D.Colognesi, A.Filabozzi, F.Menzinger,*
 "An X-ray Diffraction Study of Liquid Chlorine"
Proceedings Congresso Nazionale di Fisica della Materia di Brescia
 (13-16 giugno 1994).

15. *C. Andreani, A. Filabozzi, A. Deriu*
 "Dynamics of hydrogen atoms in superoxide dismutase "
Proceedings del International Workshop: QuasiElastic Neutron
Scattering - QENS 95 Parma Italy Settembre 7-8 (1995).

16. *C. Andreani, A.Filabozzi, A.Deriu, D.Di Cola, F.Menzinger, A.Desideri*
 "Dynamics of Cu/Zn Superoxide Dismutase"
Proceedings Congresso Internazionale QENS'95 di Parma (7-8
 settembre 1995).

17. *C. Andreani, A.Deriu, A.Filabozzi, D.Russo*
 "Temperature dependence of low frequency dynamics of
 Superoxide Dismutase derived by quasi-elastic and inelastic neutron
 scattering"
Proceedings Convegno annuale SISN-SILS, Roma 25-27 Giugno
 1996.

18. *C. Andreani, A.Deriu, A.Filabozzi, D.Russo*
 "Temperature dependence of low frequency dynamics by inelastic
 neutron scattering"

Proceedings 1st European Conference on Neutron Scattering, ECNS'96, Interlaken (CH), 8-11 Ottobre, 1996

19. *C. Andreani, D. Colognesi, A. Filabozzi, M. Nardone, R. Azuah*
"Temperature dependence of single particle kinetic energy in liquid parahydrogen"
Proceedings 1st European Conference on Neutron Scattering, ECNS'96, Interlaken (CH), 8-11 Ottobre, 1996.
20. *C. Andreani, D. Colognesi, A. Filabozzi, M. Nardone, E. Pace*
"Deep inelastic neutron scattering from dense fluid parahydrogen"
Scientific Highlights in ISIS (1997) *Annual Report* - pag 60.
21. *C. Andreani, D. Colognesi, A. Filabozzi,*
"Atomic and molecular momentum distributions in quantum fluids by Compton Neutron Scattering"
Proceedings 1st European Conference on Neutron Scattering, ECNS'96, Interlaken (CH), 8-11 Ottobre, 1996.
22. *C. Andreani, M.A. Ricci, M. Nardone, F. P. Ricci*
"Orientational Correlations in liquid hydrogen halides: the special case of HCl"
Proceedings VIII Congresso Nazionale della Societa di Spettroscopia Neutronica Roma 7-9 Ottobre 1997.
23. *C. Andreani, D. Colognesi, E. Degiorgi, M. Nardone, R. Senesi*
"VESUVIO Project"
Proceedings Congresso Nazionale dell'INFM Rimini Giugno 1998.
24. *C. Andreani, D. Colognesi, E. Degiorgi, M. Nardone, R. Senesi*
"VESUVIO Project"
Proceedings Congresso Nazionale dell'INFM Catania Giugno 1999.
25. *C. Andreani, D. Colognesi and R. Senesi*
" Kinetic energy in low density supercritical He"
Proceedings della EPS- IV Liquid Matter Conference"- Granada (Spagna)
Luglio (1999)
26. *J Tomkinson, ZA Bowden, J Mayers, J Norris, NJ Rhodes, C Andreani, D Colognesi, AL Fielding, M Nardone, M Praitano*
[VESUVIO. A project to provide enhanced neutron scattering capabilities at the highest energy transfers](#)
Book Conference proceedings. ECNS'99. 2. European conference on neutron scattering (1999)

27. **C.Andreani**
 "Spectroscopy with eV neutrons"
Atti della Convegno "F. P. Ricci: His legacy and future perspectives of neutron spectroscopy" Roma 26 Ottobre (2000), SIF, Editrice Compositori Bologna.
28. **C. Andreani, D. Colognesi, E. Degiorgi, M. Nardone, R. Senesi**
 "VESUVIO Project"
Proceedings Congresso Nazionale dell'INFM Genova Giugno 2000.
29. **C. Andreani, A. Pietropaolo,**
 "The Resonance Detector Technique for Deep Inelastic Neutron Scattering on eVS spectrometer", *Proceedings al congresso annuale della SISN, Roma 8-10 October 2000;*
30. **C. Andreani, D. Colognesi, E. Degiorgi, M. Nardone, R. Senesi**
 "VESUVIO Project".
Proceedings Congresso Nazionale dell'INFM Roma June 2001.
31. **R. Senesi, C. Andreani, D. Colognesi, A. Cunsolo, M. Nardone**
 "Kinetic energy in solid ^3He from deep inelastic neutron scattering", *Societa' Italiana di Fisica, Atti di Conferenze* **76**, 97-104 (2001).
32. **R. Senesi, C. Andreani, D. Colognesi**
 "Single Particle kinetic energy in solid and dense liquid ^3He .
Scientific Highlights in *ISIS 2001 Annual Report - CCLRC Rutherford Appleton Laboratory (UK) pag 60.*
33. **C. Andreani, A. Pietropaolo, A. D'Angelo, G. Gorini, R. Senesi, M. Tardocchi** "γ detectors for Deep Inelastic Neutron Scattering in the 1-100 eV region"
Proceedings International Conference on Neutron Scattering, München, 9.-13. September 2001
34. **C. Andreani, Tardocchi, A. D'Angelo, G. Gorini, S. Imberti, A. Pietropaolo, N. Rhodes, E. Schooneveld, R. Senesi**
 "Sviluppo di un rivelatore di neutroni epitermici per spettroscopia dei materiali in regime di diffusione altamente anelastica"
Proceedings Congresso Annuale SISN (Societa' Italiana di Spettroscopia di Neutroni) Milazzo October 2001.
35. **J. Tomkinson, C. Andreani, R. Newport, G. Gorini, J. Mayers, A. D'Angelo, N. Rhodes, E. Schooneveld, Z. Bowden and, R. Coleman** 1
 "The eVERDI project : Electron-Volt Energy Resonance Detector

Instrument"

Proceedings European Conference Bonn 16-17 May 2002 'ESS – The European Spallation Source / The European Source of Science'.

36. *C. Andreani, D. Colognesi, E. Degiorgi, A. Filabozzi, M. Nardone, E. Pace, A. Pietropaolo and R. Senesi,*
"Double difference method in Deep Inelastic Neutron Scattering on the VESUVIO"
Proceedings European Conference Bonn 16-17 May 2002 'ESS – The European Spallation Source / The European Source of Science'.
37. *R. Senesi, C. Andreani, D. Colognesi, A. Cunsolo and M. Nardone*
"Deep Inelastic Neutron Scattering determination of the single particle in liquid ^3He and ^3He - ^4He mixtures"
Proceedings European Conference Bonn 16-17 May 2002 'ESS – The European Spallation Source / The European Source of Science'.
38. *M.A. Ricci, C. Andreani, D. Colognesi and E. Degiorgi*
"Proton Dynamics in Supercritical Water"
Proceedings European Conference Bonn 16-17 May 2002 'ESS – The European Spallation Source / The European Source of Science'.
39. *J. Tomkinson, J. Mayers, T. Abdul-Redah, W. G. Stirling, A. L. Fielding, C. Andreani, M. Nardone, D. Colognesi, R. Senesi and E. Degiorgi,*
"The VESUVIO Project"
Proceedings European Conference Bonn 16-17 May 2002 'ESS – The European Spallation Source / The European Source of Science'.
40. *A. Pietropaolo, C. Andreani, A. D'Angelo, G. Gorini, S. Imberti, N. Rhodes, E. M. Schooneveld, R. Senesi, M. Tardocchi*
"The resonance detector spectrometer for neutron spectroscopy in the eV energy region"
Proceedings of Eleventh International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, September (2002), Pruhonice (Prague) Czech Republic, World Scientific New Jersey.
41. *M. Tardocchi, C. Andreani, A. D'Angelo, G. Gorini, S. Imberti, A. Pietropaolo, N. Rhodes and E. Schooneveld,*
"A novel detector for Deep Inelastic Neutron Scattering experiments at a pulsed neutron source"
Proceedings European Conference Bonn 16-17 Maggio 2002 'ESS – The European Spallation Source / The European Source of Science'.
42. *M. Tardocchi, C. Andreani, A. D'Angelo, G. Gorini, S. Imberti, A. Pietropaolo, R. Senesi*
"Cadmium-Zinc-Tellurium (CZT) detector for Deep Inelastic

Neutron Scattering experiments at a pulsed neutron source”
Proceedings European Spallation Source Conference, Bonn, 15-17 May 2002.

43. M. Tardocchi, A. Pietropaolo, C. Andreani, G. Gorini, R. Senesi
 “e.VERDI, electron Volt energy Resonant Detector Instrument”,
Proceedings INFMeeting, Bari 24-28 June 2002.
44. M. Tardocchi, A. Pietropaolo, C. Andreani, G. Gorini, R. Senesi
 “VESUVIO, a Spectrometer to provide enhanced neutron scattering capability at the highest energy transfers”
Proceedings INFMeeting, Bari 24-28 June 2002.
45. M. Tardocchi, A. Pietropaolo, R. Senesi, C. Andreani, G. Gorini
 “Advances in resonant detectors for epithermal neutron spectroscopy at pulsed neutron sources “
Proceedings 9th Pisa Meeting on advanced detectors, Isola d’Elba 25-31 May 2003;
46. C. Andreani, A. Filabozzi, G. Gorini, E. Perelli-Cippo, A. Pietropaolo, R. Senesi, M. Tardocchi
 “Assessment of a silicon detector for pulsed neutron scattering experiments”,
Proceedings 3rd European Conference on Neutron Scattering Montpellier, 3-6 Settembre 2003.
47. A. Pietropaolo, C. Andreani, A. D’Angelo, R. Senesi, S. Imberti, G. Gorini, M. Tardocchi, E. Perelli-Cippo, N. Rhodes, E. Schooneveld
 “Photon detectors for epithermal neutron scattering at high- $\hbar\omega$ and low- q ”
Proceedings 3rd European Conference on Neutron Scattering, Montpellier, 3-6 September 2003
48. C. Andreani, A. D’Angelo, A. Pietropaolo, R. Senesi, G. Gorini, M. Tardocchi, N. Rhodes, E. M. Schooneveld
 “Condensed matter studies with 20-100 eV neutrons: effective detection systems for High Inelastic Neutron Scattering and Deep Inelastic Neutron Scattering”.
Scientific Highlights in ISIS (2003) Annual Report, CCLRC Rutherford Appleton Laboratory (UK).
49. C. Andreani, A. Pietropaolo, R. Senesi, , G. Gorini , M. Tardocchi
 “New perspectives for electronVolt neutron spectroscopy on inverse geometry instruments at pulsed sources”

Proceedings del ICANS-XVI 16th Meeting of the International Collaboration on Advanced Neutron Sources May 12 – 15, (2003) Düsseldorf-Neuss, Germany.

50. **C. Andreani**, A. Pietropaolo, R. Senesi, G. Gorini, E. Perelli-Cippo, M. Tardocchi, N. Rhodes, E. M. Schooneveld
 "Density of States in ice measured using the new VLAD detector technology:"
Scientific Highlights in ISIS (2004) Annual Report, CCLRC Rutherford Appleton Laboratory (UK).

51. A. Filabozzi, **C. Andreani**, M.P. De Pascale, A. Pietropaolo, R. Senesi, G. Gorini, E. Perelli-Cippo, M. Tardocchi, P.G. Radaelli, W. Kockelmann
 "Non invasive neutron diffraction analyses of marbles from the "Edificio con Tre Esedre" in Villa Adriana"
Proceedings del Primo Incontro Internazionale, "Rileggere l'Antico. Architetture di epoca imperiale: metodi, tecniche e modelli a confronto", Roma, 13-15 dicembre (2004), Complesso monumentale S.Michele a Ripa

52. **C. Andreani**, G. Gorini, E. Perelli-Cippo A. Pietropaolo, M. Tardocchi, E. M. Schooneveld, R. Senesi,
 "A Resonance Detector Technique Optimized for Inelastic Neutron Scattering Studies at the eV Energies in Condensed Matter"
Proceedings all' ACNS 2004 American Conference on Neutron Scattering, HOSTED BY the NIST CENTER FOR NEUTRON RESEARCH College Park, Maryland, June 6–10, 2004 (USA)

53. R. Senesi, **C. Andreani**, A. Filabozzi, G. Gorini, S. Nufri, E. Perelli-Cippo, A. Pietropaolo, N. Rhodes, E. M. Schooneveld, M. Tardocchi,
 "Deep Inelastic Neutron Scattering from water in the 1-40 eV energy range employing the Resonance Detector Spectrometer configuration"
Proceedings ACNS 2004 American Conference on Neutron Scattering, HOSTED BY the NIST CENTER FOR NEUTRON RESEARCH College Park, Maryland, June 6–10, 2004 (USA)

54. A Pietropaolo, **C Andreani**, R Senesi, G Gorini, M Tardocchi, N Rhodes, E M Schooneveld, A D'Angelo ,
 "Solid state and scintillation detectors for electron Volt neutron spectroscopy"
Proceedings 2004 IEEE NSS/MIC/SNPS and RTSD Rome , session: Nuclear Science Symposium (NSS), October 16-22, 2004

55. A. Filabozzi, A. Pietropaolo, **C. Andreani**, M. De Pascale, G. Gorini, W. Kockelmann, E. Perelli-Cippo, R. Senesi, M. Tardocchi

“Texture and structure studies on marbles from Villa Adriana”
Proceedings 1st International Workshop on: "Science, Technology and Cultural Heritage", Cinema Festival Palace, Venice Lido, Italy - June 29 - July 1, 2004.

56. A. Filabozzi, A. Pietropaolo, C. **Andreani**, M. De Pascale, W. Kockelmann, G. Gorini, E. Perelli-Cippo, R. Senesi, M. Tardocchi
 “Texture and structure studies on marbles from Villa Adriana”
Proceedings I Meeting dell’Associazione Italiana del vuoto AIV, Venezia 29 giugno-1 luglio 2004.

57. C. **Andreani**, E. Perelli-Cippo, G. Gorini, M. Tardocchi, A. Pietropaolo, R. Senesi, S. Imberti, N.H. Rhodes, E. Schooneveld
 “High Energy Neutron Scattering from Water in the 1-40 eV Energy Range Employing the Resonance Detector Spectrometer Configuration”.
Proceedings Gordon Research Conference, Water and Aqueous Solutions, August 1st – 6th 2004 Holderness School, Plymouth, New Hampshire, USA.

58. E. Perelli-Cippo, G. Gorini, M. Tardocchi, C. **Andreani**, A. Pietropaolo, R. Senesi, S. Imberti, N. J. Rhodes, E. Schooneveld
 energy range employing the Resonance Detector Spectrometer configuration”
Proceedings: INFMeeting, Genova 8-10 Giugno 2004.

59. C. **Andreani**, A. Pietropaolo, R. Senesi, E. Perelli-Cippo, G. Gorini, M. Tardocchi, S. Imberti, N. Rhodes, E. Schooneveld
 “A Resonance Detector Technique optimized for inelastic neutron scattering studies at the eV energies in condensed matter”
Proceedings: INFMeeting, Genova 8-10 Giugno 2004;

60. G. Gorini, E. Perelli-Cippo, M. Tardocchi, O. Cremonesi, C. **Andreani**, A. Pietropaolo, R. Senesi, S. Imberti, N. Rhodes, E. Schooneveld
 “Development of instrumentation for epithermal neutron scattering at very low angle
Proceedings INFMeeting, Genova 8-10 Giugno 2004;

61. R. Senesi, C. **Andreani**, D. Fernandez-Canoto, V. Garbuio, G. Gorini, S. Imberti, E. Perelli-Cippo, A. Pietropaolo, N.J. Rhodes, E.M. Schooneveld, M. Tardocchi
 “Neutron spectroscopy of high energy excitations on the VESUVIO spectrometer”

Proceedings del ICANS-XVII 17th Meeting of the International Collaboration on Advanced Neutron Sources April 25 – 29, (2005) Santa Fe, New Mexico USA.

62. A. Pietropaolo, C. **Andreani**, D. Fernandez-Canoto, V. Garbuio, G. Gorini, S. Imberti, E. Perelli-Cippo, R. Senesi, M. Tardocchi
 “Resolution in High energy Inelastic Neutron Scattering Using VESUVIO spectrometer”
Proceedings del ICANS-XVII 17th Meeting of the International Collaboration on Advanced Neutron Sources April 25 – 29, 2005 Santa Fe, New Mexico USA.

63. C. **Andreani**, S. Imberti, A. Pietropaolo, R. Senesi, G. Gorini, E. Perelli-Cippo, M. Tardocchi, T. Abdul-Redah, J. Mayers, N.J. Rhodes, E. M. Schooneveld, J. Tomkinson
 “High Energy Inelastic Neutron Scattering on the VESUVIO spectrometer at ISIS”
 Published on [Neutron News](#) **16** 30 (2005)

64. V. Garbuio, C. **Andreani**, D. Fernandez-Canoto, S. Imberti, A. Pietropaolo, R. Senesi, G. Gorini, E. Perelli-Cippo, M. Tardocchi, N.J. Rhodes, E.M. Schooneveld
 “A novel neutron scattering technique for the study of the eV energy
Proceedings MMD meeting, Genova, 22-25/6/2005.

65. Zs. Kasztovszky for the Ancient Charm collaboration (G. Gorini, R. Cattaneo, E. Perelli Cippo, A. Pietropaolo, M. Tardocchi, C. **Andreani**, B. Adembri, M. L. Arancio, P.A. Caroppi, G. Festa, P. De Pascale, D. Malfitana, R. Senesi, K. T. Biro, K. Dúzs, Zs. Hajnal, T. Belgya, Zs. Kasztovszky, Z. Kis, L. Szentmikósi, A. Kirfel, J. Jolie, P. Kudejova, T. Materna, R. Schulze, P. Schillebeeckx, A. Borella, D. Fontijn, C.W.E. van Eijk, V.R. Bom, M.C. Clarijs, M.C. Moxon, H. Postma, W. Kockelmann, E. Godfrey, J.A. James, P.G. Radaelli, N.R. Rhodes, A. Scherillo, E.M. Schooneveld, D. Visser)
 “ANCIENT CHARM: A new project for neutron-based 3D imaging with applications to archaeological research”
Proceedings: SYMPOSIUM ON ARCHAEOLOGY, Quebec City (Canada), 2/6 May 2006

66. “G. Festa for the Ancient Charm collaboration (G. Gorini, R. Cattaneo, E. Perelli Cippo, A. Pietropaolo, M. Tardocchi, C. **Andreani**, B. Adembri, M. L. Arancio, P.A. Caroppi, P. De Pascale, D. Malfitana, R. Senesi, K. T. Biro, K. Dúzs, Zs. Hajnal, T. Belgya, Zs. Kasztovszky, Z. Kis, L. Szentmikósi, A. Kirfel, J. Jolie, P. Kudejova, T. Materna, R. Schulze, P. Schillebeeckx, A. Borella, D. Fontijn, C.W.E. van Eijk, V.R. Bom, M.C.

- Clarijs, M.C. Moxon, H. Postma, W.Kockelmann, E. Godfrey, J.A. James, P.G. Radaelli, N.R. Rhodes, A. Scherillo, E.M. Schooneveld, D. Visser)
 ANCIENT CHARM: A new project for neutron-based 3D imaging with applications to archaeological research
Proceedings (1st prize winner): Looking Forward to the Past: Science and Heritage, Tate Modern London 28 November 2006.
67. G. Festa, C. **Andreani**, A. Filabozzi, D. Malfitana, J. Poblome
 "Neutron Techniques in Cultural Heritage"
Acheometria Muhely, III.2 32-36 (2006).
 68. G. Festa, C. **Andreani**, A. Filabozzi, D. Malfitana, J. Poblome
 "Neutron technique in Cultural Heritage II"
Muhelyetria Múhely 2006/2
 69. Zsolt Kasztovszky and the Ancient Charm Collaboration
 "ANCIENT CHARM: a new European project for neutron-based 3D imaging with applications to archaeological research"
Proceedings SYMPOSIUM ON ARCHAEOOMETRY, Quebec City (Canada), 2/6 May (2006)
 70. M. Violante, L. Sterpone, A. Manuzzato, S. Gerardin, P. Rech, M. Bagatin, A. Paccagnella, C. **Andreani**, A. Pietropaolo, G. Cardarilli, S. Pontarelli, C. Frost
 "A New Hardware/Software Platform and a New 1/E Neutron Source for Soft Error Studies: Testing FPGAs at the ISIS Facility"
Proceedings IEEE RADiation Effects Conference (RADECS) - Workshop or symposium (2006)
 71. M. Violante, M. Sonza Reorda, L. Sterpone, A. Manuzzato, S. Gerardin, P. Rech, M. Bagatin, A. Paccagnella, C. **Andreani**, G. Gorini, A. Pietropaolo, G. Cardarilli, A. Salsano, S. Pontarelli, C. Frost
 "A new hardware/software platform for the soft-error sensitivity evaluation of FPGA devices" LATW2007 - Cuzco, Peru - Int. Conf. *Proceedings* (2007)
 72. Zs. Kasztovszky, Z. Kis, T. Belgya, W. Kockelmann, G. Festa, A. Filabozzi, C. **Andreani**, A. Kirfel, K. T. Biró, K. Dús, Zs. Hajnal, P. Kudejova and the Ancient Charm Collaboration
 "Prompt gamma activation analysis and time of flight neutron diffraction neutron on 'black boxes' in the Ancient Charm project
Proceedings: 12th Proceedings at the International Conference on Modern Trends in Activation Analysis Tokyo Metropolitan Univ., Hachioji-shi, Tokyo, JAPAN, (Sep. 16-21 2007).

73. F. Lo Celso, V. Benfante, R. Triolo, N. Kardjilov, A. Hilger, G. Festa, A. Filabozzi, **C. Andreani**
 "Application of Neutron Techniques on Marbles of Archeological
Proceedings: 4th European Conference on neutron scattering, 25-29
 June 2007, Lund, (Sweden)

74. A. Pietropaolo, **C. Andreani**, M. Tardocchi, G. Gorini, C.D. Frost , S
 Ansell, A. Paccagnella, S. Gerardin, A. Salsano, S. Pontarelli, "Soft error
Proceedings: 4th European Conference on neutron scattering, 25-29
 June 2007, Lund, (Sweden)

75. T. Belgia, and the Ancient Charm collaboration (G. Gorini, R. Cattaneo,
 E. Perelli Cippo, A. Pietropaolo, M. Tardocchi, **C. Andreani**, B. Adembri,
 M. L. Arancio, P.A. Caroppi, G. Festa, P. De Pascale, D. Malfitana, R.
 Senesi, K. T. Biro, K. Dúzs, Zs. Hajnal, T. Belgia, Zs Kasztovszky, Z. Kis,
 L. Szentmikósi, A. Kirfel, J. Jolie, P. Kudejova, T. Materna, R. Schulze, P.
 Schillebeeckx, A. Borella, D. Fontijn, C.W.E. van Eijk, V.R. Bom, M.C.
 Clarijs, M.C. Moxon, H. Postma, W.Kockelmann, E. Godfrey, J.A. James,
 P.G. Radaelli, N.R. Rhodes, A. Scherillo, E.M. Schooneveld, D. Visser)
 "Radiography driven PGAA and neutron diffraction measurements
 on Black Boxes designed for the 'ANCIENT CHARM' project"
Proceedings: 37th International Symposium on Archaeometry, Siena,
 12-16 May 2008

76. Zs. Kasztovszky, Z. Kis, T. Belgia, W. Kockelmann, S. Imberti, E. M.
 Schooneveld, G. Festa, A. Filabozzi, **C. Andreani**, A. Kirfel, K. T. Biró, K.
 Dúzs, Zs. Hajnal, P. Kudejova, M. Tardocchi and the Ancient Charm
 Collaboration "Prompt Gamma Activation Analysis and time of flight
 neutron diffraction of " in the 'Ancient Charm' project"
 12th Proceedings at the International Conference on Modern Trends
 in Activation Analysis Tokyo Metropolitan Univ., Hachioji-shi,
 Tokyo, JAPAN, (Sep. 16-21 2007). Special issue to be published,
 September 2008

77. G. Festa, **C. Andreani**, W. Kockelmann, A. Kirfel and the Ancient Charm
 Collaboration (et al.)
 'Neutron Diffraction Analysis of 'Black Boxes''
 Archeometriai Muhely, Hungary, Nr. 2008/1

78. G. Cellere, S. Gerardin, M. Bagatin, A. Paccagnella, A. Visconti, M.
 Bonanomi, S. Beltrami, P. Roche, G. Gasiot, R. Harboe Sørensen, A.
 Virtanen, C. Frost, P. Fuochi, **C. Andreani**, G. Gorini, A. Pietropaolo,
 S. Platt.
 "Neutron-induced soft errors in advanced Flash memories"
Proceedings of the 2008 IEEE International Electron Devices Meeting, San

Francisco, CA, December 15-17, (2008)

79. *M. Bagatin, S. Gerardin, A. Paccagnella, C. Andreani, G. Gorini, A. Pietropaolo, S.P. Platt, C. D. Frost*
"Factors Impacting the Temperature Dependence of Soft Errors in Commercial SRAMs"
Proceedings at RADECS 2008, Jyvaskyla, Finland, September 10-12th, (2008).
80. *T. Materna and the Ancient Charm Collaboration (C. Andreani et al.)*
"Combined neutron imaging techniques for cultural heritage purpose"
Conference proceedings of The Thirteenth International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics (CGS13), August 25–29, (2008) Cologne, Germany
81. *T. Materna and the Ancient Charm Collaboration (C. Andreani et al.)*
"New Neutron Imaging Techniques for Cultural Heritage Purposes"
Conference Proceedings of the 2008 Nuclear Science Symposium, Medical Imaging Conference and 16th Room Temperature Semiconductor Detector Workshop (IEEE), Octobre 19-25, (2008) Dresden, Germany
82. *G. Gorini, H. Kamermans, R. Cattaneo, E. Perelli Cippo, A. Pietropaolo and M. Tardocchi, C. Andreani, B. Adembri, M.L. Arancio, P.A. Caroppi, M. De Pascale, G. Festa, D. Malfitana, R. Senesi, A. M. Giusti, A. P. Recchia, S. Porcinai, K.T. Biró, K. Dúzs, Zs. Hajnal, T. Belgya, Zs. Kasztovszky, Z. Kis, L. Szentmikósi, A.Kirfel, J. Jolie, R. Schulze, P. Kudejova, P. Schillebeeckx, A. Borella,, T. Materna, D. Fontijn, L. Amkreutz, S. Scholten, C.W.E. van Eijk, V.R. Bom, M.C. Clarijs, M.C. Moxon, H. Postma, E. Godfrey, W. Kockelmann, P. Radaelli, N.J. Rhodes, E.M. Schooneveld and D. Visser.*
"Neutron-based Analysis for Cultural Heritage Research. Results of the Ancient Charm project"
14th International Congress "Cultural Heritage and New Technologies" Vienna, (2009)
83. *C. Andreani, R. Senesi, A. Pietropaolo, G. Gorini*
"Perspectives for electron Volt neutron spectroscopy at Long Pulse Spallation Neutron Sources "
Proceedings ICANS XIX, 19th meeting on Collaboration of Advanced Neutron Sources March 8 – 12, Grindelwald, Switzerland, PSI-Proceedings 10-01 ISSN-Nr. 1019-6447, (2010)

84. *D. Flammini, A. Pietropaolo, R. Senesi, C. Andreani, F. Mc Bride, A. Hodgson, L. Lin, R. Car, M. A. Adams*
 "Proton harmonic motion in ice"
 Highlights ISIS Annual Report (2010), pag 14

85. *M. Rebai, C. Andreani, A. Fazzi, C. D. Frost, L. Giacomelli, G. Gorini, E. Milani, E. Perelli Cippo, A. Pietropaolo, G. Prestopino, E. Schooneveld, M. Tardocchi, C. Verona and G. Verona Rinati*
 "Fission diamond detector tests at the ISIS spallation neutron source"
 Proceedings of the XIX International collaboration on Advanced Neutron Sources, ICANS XIX, PSI-Proceedings 10-01 ISSN-Nr. 1019-6447, (2010).

86. *C. Andreani, R. Senesi, A. Pietropaolo, G. Gorini*
 "Perspectives for electronvolt neutron spectroscopy at long pulse spallation neutron sources "
 Proceedings of the XIX International collaboration on Advanced Neutron Sources, PSI-Proceedings. 10-01, ISSN-Nr. 1019-6447 (2010).

87. *M. Rebai, G. Gorini, A. Pietropaolo, M. Tardocchi, A. Fazzi, E. Milani, G. Verona Rinati, C. Andreani, R. Senesi, C. D. Frost, E. M. Schooneveld, N. J. Rhodes, R. Bedogni, A. Esposito,*
 "Development of high energy neutron counters for the CHIPIR beam line at ISIS-TS2"
 Proceedings of the XIX International collaboration on Advanced Neutron Sources, PSI-Proceedings. 10-01, ISSN-Nr. 1019-6447 (2010).

88. *A. M. Paradowska, A. Tremsin , J. F. Kelleher, S. Y. Zhang, S. Paddea, G. Burca, J. A. James, A. Rehan, N. H. Faisal, F. Grazzi, G. Festa, C. Andreani, F. Civita, P. J. Bouchard, W. Kockelman, M. E. Fitzpatrick*
 Modern and Historical Engineering Components Investigated by Neutron Diffraction.
 Proceedings of ATEM'11, September 19-21, 2011, Kobe, Japan

89. *L. Giacomelli, M. Rebai, A. Fazzi, E. Perelli Cippo, M. Tardocchi, C. Andreani, C. Frost, A. Pietropaolo, E. Schooneveld and G. Gorini*
 "Diamond detector for high rate monitors off a st neutron beams",
 Proceedings of the International Workshop on Fusion Neu-trons and Sub-critical Nuclear Fission (FUNFI) held at Villa Monastero, Varenna (Italy) September 12-15, (2011).

90. *M Rebai, L Giacomelli, C Andreani, A Fazzi, C D Frost, E Perelli Cippo, A Pietropaolo, N Rhodes, M Tardocchi, E Schooneveldd and G Gorini*
 Proceedings of the 2nd International Workshop on Fast Neutron Detectors and Applications (FNDA2011), Kibbutz Ein Gedi, near the

Dead Sea in Israel 6th-11th November (2011).

91. *A Miceli, G Festa, R Senesi and C Andreani*
“Monte Carlo simulations of bi-parametric Prompt Gamma Activation Analysis for imaging of Cultural Heritage artefacts”
Proceedings of the International Conference on Neutron Scattering (ICNS), 8-12 July 2013, Edinburgh (UK)
92. *A Parmentier, C Andreani, R Senesi, C G Salzmann and J J Shephard*
“Characterization of vibrational spectra of amorphous ices by inelastic (INS) and deep-inelastic (DINS) neutron scattering”
Proceedings of the International Conference on Neutron Scattering (ICNS), 8-12 July 2013, Edinburgh (UK)
93. *G. Romanelli, M. Ceriotti, D Manolopoulos, R Senesi and C Andreani*
“Oxygen momentum distribution in water: quantum effects and anisotropy”
Proceedings of the International Conference on Neutron Scattering (ICNS), 8-12 July 2013, Edinburgh (UK)
94. *G. Festa, R. Senesi, G Tardino, D. C. Mannes, G. Gorini and C. Andreani*
“Neutrons and music: Imaging investigation of ancient flute musical instruments”
Proceedings of the International Conference on Neutron Scattering (ICNS), 8-12 July 2013, Edinburgh (UK)
95. *M Bagatin, S Gerardin, A Paccagnella, V Ferlet-Cavrois, A Visconti, G Gorini, C Andreani, C. D. Frost*
[“Neutron and alpha SER in advanced NAND Flash memories”](#)
Proceedings of the IEEE Conference “Radiation and Its Effects on Components and Systems (RADECS), 23 September (2013)
96. *G. Festa, L. Arcidiacono A. Pappalardo, T. Minniti, C. Cazzaniga, A. Scherillo, C. Andreani and R. Senesi*
“Isotope identification capabilities using time resolved prompt gamma emission from epithermal neutrons”
Proceedings Proceedings of the ICANS XXII, International Collaboration on Advanced Neutron Sources, 27–31 March 2017, Saïd Business School, University of Oxford, UK
97. *Matthew Krzystyniak, Giovanni Romanelli, Margit Fabian, Matthias Gutmann, Giulia Festa, Laura Arcidiacono, Martyn Gigg, Kacper Druzbecki, Carla Andreani, Roberto Senesi, and Felix Fernandez-Alonso*
“VESUVIO+: The Current Testbed for a Next-generation Epithermal Neutron Spectrometer”

Proceedings of the ICANS XXII, International Collaboration on Advanced Neutron Sources, 27–31 March 2017, Saïd Business School, University of Oxford, UK

98. *A Cianchi, C. Andreani, R. Bedogni, G. Festa, O. Sans Planell, R. Senesi*
“Towards a compact Laser based Neutron source”
Proceedings of the ICANS XXII, International Collaboration on Advanced Neutron Sources, 27–31 March 2017, Saïd Business School, University of Oxford, UK
99. *Carla Andreani, Andrea Fedi, Marco Ottavi, Gianluca Furano, Antimo Bruno, Roberto Senesi, Carlo Cazzaniga*
“High-energy Neutrons Characterization of a Safety Critical Computing System”
Proceedings of 30th IEEE Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems, October 23-25 Cambridge (2017).
100. *M. P. M. Marques, S.F. Parker, D. Gonçalves, A. P. Mamede, A. R. Vassalo, C. I. Makhoul, G. Festa, C. Andreani and L. A. E. Batista de Carvalho*
“A Vibrational Spectroscopic Study of Burned Human Bones”
Proceedings XVII European Conference on the Spectroscopy of Biological Molecules (ECSBM 17), 11-14 September, Amsterdam (2017).

5. ARTICOLI DIVULGATIVI

1. ‘Instrument for rapid testing of effects of high energy neutrons on electronic devices’
Carla Andreani, Chris Frost, Giuseppe Gorini and Alessandro Paccagnella, ASI Magazine, January 2014
2. “I neutroni svelano I segreti dei Beni Archeologici ed Artistici”
Carla Andreani e Giuseppe Gorini
Technology Review, www.technology.review.it N. 6, Novembre Dicembre 2006
3. “L’arte più nascosta svelata dai neutroni”
Carla Andreani, Corriere della Sera, Scienza (Uomo, Tecnologia, Ecologia, Natura) Martedì 7 Febbraio 2006
4. “E i fisici progettano una TAC per I monumenti”
intervista a **Carla Andreani** *Il Messaggero*, 17 Dicembre 2005

6. RAPPORTI TECNICI (selezione)

- [N1] *C. Andreani, P. Bosi, M. Condarelli*
"Calcolo della densita' di stati a 1-fonone del ghiaccio Ih ordinato"
Nota Interna n. 754 Istituto di Fisica "G.Marconi" - Universita' "La Sapienza" - Roma (1980)
- [N2] *A. Allen, C. Andreani, M.T. Hutchings,*
"Examination of test plate MS1 using neutron diffraction techniques"
M.P.D. 521.2, Harwell Report A.E.R.E. (26 Giugno 1981)
- [N3] *A.J. Allen, C. Andreani, M.T. Hutchings, C.G. Windsor*
"Residual stress measurements in bulk steel samples using neutron diffraction"
Report ILL (Institute Lau-Langevin) 7 agosto 1981
- [N4] *C. Andreani, P. Bosi, F. Menzinger, F. Sacchetti*
"Evaluation of the performances of a constant-Q spectrometer for the spallation neutron source SNS at Rutherford Appleton Laboratory" Proposta per la costruzione di uno spettrometro ad ISIS presentata al Rutherford Laboratory nel Maggio 1983
- [N5] *C. Andreani, C. Petrillo, F. Sacchetti*
"Accordo CNR-SERC per l'accesso italiano alle SNS"
Nota Interna del Consiglio Nazionale delle Ricerche 1984
- [N6] *C. Andreani*
"Applicazioni in metallurgia di tecniche a fasci neutronici: misure di tensioni interne nei materiali con diffrazione ad alta risoluzione"
Nota Interna ENEA-Casaccia TIB-MAT RIT 84003 (Febbraio 1984)
- [N7] *C. Andreani, F. Cilloco, R. Felici, F. Sacchetti*
"Prospettive attuali per la sorgente neutronica pulsata (LISONE)"
Rapporto Interno ISM 1985/1
- [N8] *C. Andreani, F. Cilloco, C. Petrillo, F. Sacchetti, C.G. Windsor*
"Final mechanical specification of the spectrometer PRISMA for the spallation neutron source"
Rapporto Interno ISM 1985/4
- [N9] *C. Andreani, F. Cilloco, L. Nencini, D. Rocca, R.N. Sinclair*
"The structure of liquid bromine"
Materials Physics Division AERE HARWELL MPD/NBS/265 (1985)

- [N10] *C. Andreani, F. Cilloco, L. Nencini, D. Rocca, R. N. Sinclair*
 "The structure of liquid bromine"
 Nota Interna del Dipartimento di Fisica Tor Vergata
 ROM2F/85/007 (1985).
- [N11] *A. J. Allen, M. T. Hutchings, C. G. Windsor, C. Andreani*
 "Neutron diffraction methods for the study of residual stress fields"
 Materials Physics Report AERE HARWELL R 11630 (1985)
- [N12] *A. J. Allen, M. T. Hutchings, C. G. Windsor, C. Andreani*
 "Measurements of the residual stress field within bulk steel components and weldments using neutron diffraction techniques"
 Nota Interna del Dipartimento di Fisica Tor Vergata
 ROM2F/85/008 (1985).
- [N13] *C. Andreani, C. J. Carlile, F. Cilloco, C. Petrillo, F. Sacchetti, G. C. Stirling, C. G. Windsor*
 "PRISMA-A spectrometer for the measurements of coherent excitations on a pulsed spallation neutron source"
 RAL Report 026 Aprile 1986
- [N14] *J. M. F. Gunn, C. Andreani, J. Mayers*
 "A simple approach to impulsive neutron scattering"
 RAL Report 86-093 Novembre 1986
- [N15] *C. Andreani, U. Steigenberger and C. G. Windsor*
 "PRISMA" - A unique phonon spectrometer
 Harwell Report MPD/NBS/377 1990
- [N16] *C. Andreani, A. Filabozzi, E. Pace*
 "Deep inelastic neutron scattering"
 Nota Interna Dipartimento di Fisica Universita' di Tor Vergata
 1994
- [N17] *C. Andreani, E. Degiorgi, A. Filabozzi, D. Colognesi, M. Nardone*
 "Double difference technique applied to deep inelastic neutron scattering on eVs spectrometer: Au and U foils"
 Nota Interna Dipartimento di Fisica Universita' di Tor Vergata
 Rom2F/98
- [N18] *R. Senesi, C. Andreani and D. Colognesi*
 "Single particle kinetic energy in solid and dense liquid ^3He "
 articolo su invito in Highlights of ISIS Science, The Rutherford
 Appleton Laboratory - ISIS Facility Annual Report 2000-2001,

- [N19] **C. Andreani**, A. Pietropaolo, R. Senesi, G. Gorini, M. Tardocchi, A. Bracco N. Rhodes, E. M. Schooneveld
"Electron Volt spectroscopy at a pulsed neutron source using a resonance detector technique",
CCLRC Technical Report RAL-TR-2002-015 (2002).
- [N20] **C. Andreani**, A. Pietropaolo, R. Senesi, G. Gorini, M. Tardocchi, N. Rhodes, E. M. Schooneveld
"Condensed matter studies with 20-100 eV neutrons: effective detection systems for high inelastic neutron scattering and deep inelastic neutron scattering", - ISIS Facility Annual Report 2003,
CCLRC Technical Report RAL-TR (2003).
- [N21] **C. Andreani**, A. Pietropaolo, R. Senesi, G. Gorini, E. Perelli Cippo, M. Tardocchi, N. Rhodes, E. M. Schooneveld,
"Density of states in ICE measured using the new VLAD detector technology", ISIS Facility Annual Report 2004,
CCLRC Technical Report RAL-TR (2004).
- [N22] G. Gorini, E. Perelli-Cippo, M. Tardocchi, **C. Andreani**, A. D'Angelo, A. Pietropaolo, R. Senesi, S. Imberti, A. Bracco, E. Previtali, G. Pessina, N. J. Rhodes, E. M. Schooneveld
"The resonant detector and its application to epithermal neutron spectroscopy"
CCLRC Technical Report RAL-TR (2004).
- [N23] **C. Andreani**, G. Gorini, A. Pietropaolo, M. Tardocchi, M. Bagatin, Paolo Rech, Simone Gerardin, Andrea Cester, Alessandro Paccagnella, A. Salsano
"Soft error tests performed at the VESUVIO spectrometer at ISIS"
CCLRC Technical Report RAL-TR (2005).
- [N24] **C. Andreani**, A. Pietropaolo, M. P. De Pascale, G. Festa
"Design and realisation of a xyz- ω table for automated sample movements in PGAI/NT experiments."
Nota Interna del Dipartimento di Fisica Universita' di Tor Vergata
ROM2F/2006/19
- [N25] **C. Andreani**, A. Pietropaolo, M. P. De Pascale, L. Andreanelli, G. Mazzenga, E. Reali
"Design and realization of a xyz ω table for NRCI-NRCA measurements"

Report AC-07-04 nell'ambito del progetto Ancient Charm (EU Project no. 015311, FP6) - *Analysis by neutron resonant capture imaging and other emerging neutron techniques: new cultural heritage and archaeological research methods*
ROM2F/2007/19

- [N26] *Petra Kudejova and the Ancient Charm Collaboration (C. Andreani, M. P. De Pascale, G. Festa, R. Senesi et al.)*
"Supports for accurate positioning and alignment of archaeological objects"
Technical Report del 15 November 2008 AC-08-01, nell'ambito del progetto *Ancient Charm* (EU Project no. 015311, FP6) - *Analysis by neutron resonant capture imaging and other emerging neutron techniques: new cultural heritage and archaeological research methods*

La sottoscritta esprime il proprio consenso affinché i dati personali forniti possano essere trattati, nel rispetto del Decreto Legislativo 196/2003, per gli adempimenti connessi alla presente procedura.

Carla Andreani

