

## Dr. Francesca NATALI

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### Current position

CNR Scientist - PhD in Physics

Main responsible of the international project CRG-IN13 at the Nuclear Reactor 'Institut Laue Langevin' (ILL) (Grenoble, France). First Instrument Scientist.

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### Participation to national and international scientific projects

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|-------------|---|
| 2000 -      | CRG-IN13 project, established between Italy (CNR) and France (CNRS, UJA) for the exploitation of the unique potentiality of the backscattering spectrometer IN13 at ILL for the investigation of the dynamics in biological macromolecules. |
| 2008 - 2010 | MUR, PRIN: Physical properties of polymer-based nanostructured biomatrices. Collaboration with the Universities of Rome, Parma and Trento.  |

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### Member in panels, boards, editorial boards

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|-------------|---|
| 2019        | Review panel of the International Neutron Scattering facilities (NIST, USA)           |
| 2018        | Review panel of the Swedish Research Council  |
| 2011 -      | Review panel of several high impact journals (BBA, ACS Nano, Journ. Physic. Chem etc) |
| 2008 - 2010 | ILL Scientific Council representing the CRGs community at ILL (Observer).             |
| 2009        | Working-group for the 7.7 task of workpackage 7 (WP7) of the ESS-PP project.          |
| 2000 -      | International Scientific Committee of the CRG-IN13 for the proposal selection.        |

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### Member organizing committees of schools and conferences

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|------|---|
| 2018 | 'Spectroscopy in Biological System', ILL user meeting, Grenoble, France.  |
| 2012 | Qens and Wins 2014, Grenoble, FranceMember (observer) of the ILL Scientific Council representing the CRGs community at ILL. |
| 2007 | Italian school in neutron spectroscopy (Sestri Levante and Grenoble). Director.   |
| 2003 | IN13 user meeting, Grenoble.  |

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### Competences

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|-------------|--|
| Physics     | Biophysics (brain tissue, membranes, proteins, DNA), medical physics, material science, optics.  |
| Thechniques | Optical spectroscopy, crystallography, X-ray diffraction and absorption spectroscopy using standard sources and synchrotrons, neutron scattering using nuclear reactors and pulsed sources, atomic force microscopy, circular dichroism, fluorescence. |
| Languages   | Italian, French, English   |

## Academic activities

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- 2015 - 2018 Co-tutor of the PhD student Irina Piazza from University of Palermo, Grant ILL–CNR
- 2013 - 2016 Co-tutor of the PhD student Saara Laulumäki from Hamburg university (Germany), ESS grant.
- 2009 - 2012 Co-tutor (ILL supervisor) of the PhD student Wiebke Knoll from UJF university.
- 2009 - Co-tutor for several short term stage (2-5 months) students.
- 2009 Co-tutor of the diploma student Carlotta Marasini (5 months ILL stage) from Genova univ. Best master thesis prize, given by Italian Soc. of Pure and Applied Biophysics
- 2007 – 2009 Co-tutor of the PhD student Chiara Chiapponi from Parma university (Italy)
- 2001 - Hercules tutorials

## Educational background and working experiences

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- 2001 - CNR scientist (permanent position), detached at the ILL (Grenoble, France) CNR scientist (permanent position), detached at the ILL (Grenoble, France)
- 2000 - 2001 Postdoc CNR, detached at the ILL (Grenoble, France)
- 1999 - 2000 Postdoc (15 months) at the 'European Synchrotron Radiation Facility' (Grenoble, France).
- 1996 - 1999 PhD Diploma in Physics, University of Rome "La Sapienza". Subject: "Upgrading of the X-ray Absorption Spectroscopy for the study of structural fluctuations in complex systems
- 1997 - 1998 Six months ESRF collaboration contract (Grenoble, France)
- 1996 Winner of the national competition for attending the Specialization School in Medical Physics (Rome, Italy). 3 years fellowship, not attended because of the superposition with the PhD grant.
- 1996 Habilitation as member of exams committee (Physics) at the department of pharmacy, University of Rome "La Sapienza" (Italy)
- 1995 - 1996 CNR fellowship, University of Rome "La Sapienza".
- 1995 - 1996 Attending, as observer, the first year of the Specialization School in Medical Physics (Rome).
- 1989-1995 Laurea Diploma in Physics, obtained in January 2005 at the University of Rome. Specialization in Biophysics (experimental work in electrophysiology).
- 1991-1992 10 months stay in Paris with the exchange program ERASMUS (Université Paris VII, France).
- 1984-1989 High school "La Farnesina" (Rome); scientific diploma.

## Outreach

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- Several Invited speaker at national and international conferences
- Numerous oral and posters contributions
- Two press releases
- More than 80 peer reviewed publications