

## **Yves Joly Curriculum Vitae**

Date of birth: April 24th, 1959, 63 years old Place and of birth: Sète, at the Mediterranean

Sea side, France Nationality: French

4 children

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WEB page: https://neel.cnrs.fr/les-chercheurs-et-techniciens/yves-joly

- 1976 Bachelor, Auch, France
- 1982 Engineer in Physics (ENSPG, Grenoble)
  DEA *Physical Science of Matter and Radiation*, UJF, Grenoble, France
- 1984 PhD in *Physical science of Matter and Radiation*Done at Laboratoire de Spectrométrie-Physique, UJF, Grenoble, France and at the Royal Institute of Technology, Stockholm, Sweden
- 1985 Post-Doc at the CHU at Sherbrooke, Québec, Canada
- 1986 Permanent position at CNRS as Junior Researcher 2<sup>nd</sup> class, team *Surface* at Laboratoire de Spectrométrie-Physique, Grenoble, France
- 1986 9 months stay at INIFTA, La Plata, Argentina
- 1990 Junior Researcher 1st class
- 1993 Move to Laboratoire de Cristallographie, Grenoble, France
- 1995 Diploma Habilitation à Diriger des Recherches
- 2006 Senior Researcher 2<sup>nd</sup> class
- 2007 Move to Institut Néel, Grenoble, team *Theory and numerical Simulations of electronic properties*
- 2010 Change of team to Surfaces Interfaces and Nanostructures (SIN)
- 2011 2015: Deputy director of the MCMF department at Institut Néel, CNRS
- 2014 Senior Researcher 1st class

## Main research fields

1986 - 1997:

- Study of the surface of nitrides and carbides, experimentally and theoretically with low energy electron diffraction (LEED). Study of semi-conductors surfaces with low energy positron diffraction (LEPD).
- Development of an *ab initio* computational code to simulate LEED and LEPD using the finite difference method.

## From 1998:

- Theoretical study of x-ray absorption spectroscopies, and more specifically in the energy range close to the absorption edges (XANES), in dichroism, resonant diffraction, x-ray emission spectroscopy and x-ray Raman Spectroscopy.
- Development of the *ab initio* simulation software FDMNES (Finite Difference Method Near Edge Structures). Strong effort to make a user-friendly tool and for its dissemination. Web site: https://fdmnes.neel.cnrs.fr
- Application to the study of many classes of materials and special interest for transition metal oxides and their electronic properties

157 publications.

6 Chapters in text books

Collaboration with many teams in France and abroad

Participation at the conferences: XAFS9 (1996, Grenoble), XAFS12 (2002, Malmö), XAFS13 (2006, Stanford), XAFS14 (2009, Camerino), XAFS15 (2012, Beijing), XAFS16 (2015, Karlsruhe), XAFS17 (2018, Cracovia), XAFS18 (2022, Sydney).

## **Teaching**

Many courses and practical in general physics, optics, mathematics and solid-state physics.

Many workshops and tutorial in x-ray absorption spectroscopies (4-5 per year from 20 years) Most in France but also in Great Britain, Germany, USA, Argentina, Canada, Russia, ...