

New York University, Physics Department, 4 Washington Place, New York, NY 10003
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SKILLS AND INTERESTS

COMPUTING

- **Coursework (University of Southampton, UK), 2001**

- + *Introduction to C programming*

- Phases of the software development cycle: from defining the problem, to maintaining the program. Produce well structured robust software.

- Practical work involved programming exercises, exploring some common programming algorithms and problems.

- **Skills**

- + Operating systems: Microsoft Windows, DOS

- + Modelling software: Mathematica, Sonnet

- + Graphing and data analysis: Origin

- + Others: Powerpoint, Word, Latex, Labview, Autocad, Photoshop

- + Computer hardware and architecture

WEB DESIGNING

- **Skills**

- + HTML, Frontpage, Macromedia Flash

- **Developed and maintained the following web pages:**

- + phys.soton.ac.uk/super - Prof. de Groot research group

- + phys.soton.ac.uk/msl - Magnetic superlattices network (Research Network)

- + www.physics.nyu.edu - working on the artwork (in progress)

LANGUAGE

French (mother-tongue)

INTERESTS

- **Finance:** owned for 8 years a portfolio of shares which includes a variety of French companies (Thomson Multimedia, GFI Informatique, Wanadoo, France Telecom)

- **Personal:** Tennis, squash, soccer, Modern Art (photography & design), internet research

PROFESSIONAL EXPERIENCE

Post-doctoral Research Assistant (Spintronics)**2003-present**

New York University, Department of Physics, Mesoscopic Magnetism group

Conducting Ferro-Magnetic Resonance (FMR) studies of films made of transition metal ultra-thin layers (few nanometers thick). The goal is to study the magnetic properties and the magnetization relaxation mechanism of films with a layered structure similar to spin transfer devices. Those systems have potential applications as ultra-fast and high density magnetic recording media.

- **Scientific achievements:**

- : Magnetization damping in ultrathin Co films: Evidence for non-local effects

- J-M. L. Beaujour *et al.*, to be submitted to Phys. Rev. B

- : Ferromagnetic resonance study of polycrystalline Cobalt ultrathin films

- J-M. L. Beaujour *et al.*, accepted for publication in J. Appl. Phys. (2006)

- **Supervision and training experience:**

- Supervision and training of NYU graduate and undergraduate students for measurements technique.

• Selection of presentations:

- :: American Physical Society March Meeting 2005 (contributed talk)
- :: Condensed Matter Seminar at Colorado State University 2005 (invited talk)
- :: Magnetism and Magnetic Materials Conference 2005 (poster)

Research Assistant (Full time)

Jun. – Sept. 1999

Lasers and Non-linear Optics Laboratory, University of Essex, UK

Theoretical project on Vertical Cavity Surface Emitting Lasers (VCSELs)

The research group had implemented a FORTRAN program to model the propagation of monochromatic beams in VCSELs (semiconductor lasers). My role was to investigate the influence of structural defects on the opto-electronic properties of the VCSELs.

EDUCATION**Ph.D in Physics**

1999-2003

Department of Physics, University of Southampton, UK

• Scientific achievements:

Published 15 papers in peer reviewed journals. Selected publications:

- :: Giant magneto- and anisotropic resistance in an epitaxial (110) DyFe₂|YFe₂ multilayer film
J-M. L. Beaujour *et al.*, J. Magn. Magn. Mater. 272: 1943-1944 (2004)
- :: Room temperature coercivities of Tb_{1-x}Dy_xFe₂ (110) MBE grown films
J-M. L. Beaujour *et al.*, J. Appl. Phys. 93 (10): 8639-8640 (2003)
- :: Negative coercivity in epitaxially grown (110) DyFe₂|YFe₂ superlattices
J-M. L. Beaujour *et al.*, Appl. Phys. Lett. 78: 964 (2001)

• Experience with international collaboration:

Performed measurements at Grenoble High Magnetic Field Laboratory (France) and at the Neutron Reflectometry Centers at ISIS (UK) and at the Laue Langevin Laboratory (France)

• Selection of presentations:

- :: Condensed Matter Seminar Brown University 2003 (invited talk)
- :: Network workshop Leeds 2002 (contributed talk)
- :: Magnetism and Magnetic Materials Conference 2001 (poster)

Maitrise de Physique Fondamentale (equivalent to MSc. specialization in Solid State Physics)

1999

Université Denis Diderot - Paris (France)

European Fellowship (Erasmus Inter-University Exchange Program) for one year study at the University of York (UK)