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Education

- 2014** **Habilitation** in Solid State Physics (French "Habilitation à Diriger des Recherches")
2002-2006 **PhD** in Solid State Physics
2001-2002 **MSc** "Solid State Physics and Condensed Matter" (Paris 11, France)
Passed with distinctions
1998-2002 **Engineering studies** at the Ecole Supérieure de Physique et de Chimie Industrielles de la Ville de Paris (ESPCI, Paris, France)
1995-1998 University-level preparation for the competitive entrance exams to French engineering schools at the Lycée Louis-le-Grand (Paris, France)
1995 Scientific Baccalaureat (French secondary school diploma) with International Option (Paris, France).
Passed with distinctions

Professional experience

- Since 09.2007** **Associate professor at Paris 11-Orsay University, CSNSM** (Orsay, France)
05.2006 - 08.2007 **Post-doctoral position** at the Low Temperature Physics Laboratory in **RIKEN** (Wako, Japan)
Detection of single electrons on liquid helium films by means of semiconductor quantum dots
09.2002 - 04.2006 **PhD** at the Centre de Spectrométrie Nucléaire et Spectrométrie de Masse (CSNSM, Orsay, France)
Dimensionnality effects near the Metal to Insulator and Superconductor to Insulator Transitions in disordered systems ; supervision : Louis Dumoulin
09.2002 - 09.2005 **Junior teaching assistant** at Paris 11-Orsay University (Orsay, France)

Languages

French	:	Native
English	:	Fluent
Japanese	:	Conversational
German	:	Basics

Experimental techniques

- Microfabrication (clean room techniques, lithography, ...)
- Low temperature cryogenics (^3He cryostat, $^3\text{He}/^4\text{He}$ dilution refrigerator, He-free systems)
- Low noise electrical measurements
- Low temperature thermometry
- Thin films synthesis (esp. co-evaporation under ultra-high vacuum)
- Characterization and irradiation of materials using ion beam

Computer skills

OS	:	Macintosh, Windows, some Unix
Languages	:	C/C++, html
Data acquisition and treatment	:	Matlab, Labview, Origin, KaleidaGraph
CAD	:	TurboCAD

Distinctions and expertise

- 26 publications in peer-reviewed journals, 14 conference proceedings, 20 talks and seminars.
- 3 PhD students : Olivier Crauste (2010), François Couëdo (2014), Vincent Humbert (2016).
- Amongst the 2007 recipients of the **Japanese Society for the Promotion of Science (JSPS)** fellowship for a project in RIKEN on the detection of electrons at the liquid helium surface using semiconductor quantum dots.
- Expert on scientific cooperation with developed Asian countries for the **French Ministry of Research and Higher Education** (2012-2013)
- Referee for the **Agence Nationale de la Recherche (ANR)**, **Alpes Grenoble Innovation Recherche (AGIR)**, and for the **Israel Science Foundation (ISF)**
- Referee for **Journal of Low Temperature Physics**
- Member of the scientific committee of the **Triangle de la Physique** funding agency (<http://triangledephysique.fr/>)
- Expert for the Paris-Sud Associate Professor Hiring Committee (2013, 2014, 2015)
- Co-responsible for the research cooperation between Tokyo and Paris Sud Universities within the framework of their agreement "for the promotion of scientific education and research collaborations".

Selected publications

- *Full range resistive thermometers*, E. Olivieri, M. Rotter, M. de Combarieu, P. Forget, C.A. Marrache-Kikuchi, P. Pari, *Cryogenics*, **72**, 148, 2015.
- *Destruction of superconductivity in disordered materials : a dimensional crossover*, O. Crauste, F. Couëdo, L. Bergé, C.A. Marrache-Kikuchi, L. Dumoulin, *Phys. Rev. B*, **90**, 060203(R), 2014.
- *Observation of thermally activated glassiness and memory dip in a-NbSi insulating thin films*, J. Delahaye, T. Grenet, C.A. Marrache-Kikuchi, A.A. Drillien, L. Bergé, *Europhys. Lett.*, **106**, 67006, 2014.
- *Effect of annealing on the superconducting properties of a-NbSi thin films*, O. Crauste, A. Gentils, F. Couëdo, Y. Dolgorouky, L. Bergé, S. Collin, C.A. Marrache-Kikuchi, L. Dumoulin, *Phys. Rev. B*, **87**, 144514, 2013.
- *Point-contact transport properties of strongly correlated electrons on liquid helium*, D. G. Rees, I. Kuroda, C. A. Marrache-Kikuchi, M. Höfer, P. Leiderer, K. Kono, *Phys. Rev. Lett.*, **106**, 026803, 2011.
- *Observation of the Nernst signal generated by fluctuating Cooper pairs*, A. Pourret, H. Aubin, J. Lesueur, C.A. Marrache-Kikuchi, L. Bergé, L. Dumoulin, K. Behnia, *Nature Physics*, **2**, 683, 2006.