

Daniel SUCHET

Assistant Professor, Engineer from École
polytechnique

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💡 Research experience

Assistant Professor

with J.-F. Guillemoles and L. Lombez

- 📖 Advanced concepts for solar energy conversion
- 📄 *In situ* characterization
- 🔧 Multi-resolution spectroscopy

IPVF (École polytechnique)

📅 2018-present

Post doc ANR Industrial chair

with E. Johnson

- 📖 Tailored waveform excitation for selective plasma enhanced deposition
- 📄 *In situ* characterization (ellipsometry)
- 🔧 Thin film production by PECVD

LPICM (École polytechnique)

📅 2017-2018

CNRS-JSPS fellowship

with Y. Okada and J.-F. Guillemoles

- 📖 Physics of energy conversion, new concepts for PV
- 📄 Optical and electrical modelization and characterization
- 🔧 Molecular Beam Epitaxy (quantum dot, quantum well)

NextPV (University of Tokyo)

📅 2016-2017

PhD thesis in Physics

with F. Chevy and C. Salomon - TEL ID : 01390499

- 📖 Quantum mechanics for light-matter interaction, thermodynamics
- 🔧 Development of an ultra cold atom experiment (optics, vacuum, electronics)

Lab. Kastler-Brossel (ENS Ulm)

📅 2012–2016

Master internship

with M. Gonin

- 📖 Neutrino beam profiling for the T2K experiment
- 📄 Numerical simulations and data analysis
- 🏆 Prix du Centre de recherche X2008 (best internship completed at École polytechnique)

LLR (École polytechnique)

📅 Jan–July 2011

Collaboration

with J. Souchay

- 📄 Database for the Large Quasar Astrometric Catalogue

SYRTE (Paris Observatory)

📅 2007–2011

🗨️ Educational experience

Teaching

Assistant Professor

Lectures and seminars

- Bachelor program: directed works in Quantum Mechanics, lectures "Atoms and Lasers"
- Master program: "Energy Environment: Science Technology and Management"

École polytechnique

📅 2018–present

Lecturer

with Y. Okada and N. Ahsan

- Lectures "Basic Energy Engineering" on thermodynamics (L2)
- Directed studies on solar, wind and nuclear energy (L2-L3)

University of Tokyo

📅 2017 - ⌚ ~ 15h

Teaching assistant ("tutorat" and "monitorat")

with L. Guevel, M. Joffre, C. Kopper and A. Specka

- Interview for Bachelor candidates
- Tutorial classes: Quantum and statistical physics, special relativity, English
- Directed studies: Particle physics, "semestre préparatoire"
- Project supervision: International Physicists' Tournament
 - 🏆 2013: 3rd place. 2014: 1st place. 2015: 3rd place, Prix du PSC. 2016: 3rd of FPT.

École polytechnique

📅 2011–present - ⌚ ~200h

Teaching assistant

with D. Jurine (PCSI) and D. Chardon (PC*)

- Directed studies and mock exams covering the undergraduate syllabus (L1-L2).
- Classes on basic thermodynamics for adult students

Lycée Saint Louis (Paris)

📅 2009–2013 - ⌚ ~180h

Scientific instructor

training 18 primary school teachers in Seine Saint Denis for science classes.

National Education (93)

📅 2008 ⌚ full time

..... Popular Science

Scientific ambassador for the Ile de France Region

for the national Science Festival.

Ministry of Higher Education and Research

📅 2018

Public lectures

Over 100 presentations to large audiences, in particular:

📅 2011–present

- Public lecturer at the "Palais de la Découverte" Science Museum (Paris, France).
- "Science in Star Wars" (what if we were researchers in a galaxy far, far away ?)
 - 🏆 Supported by the French Physical Society
 - 🏆 Invited talks at "Journées Regards de Physicien" (SFP 2016) and Théâtre de la Reine Blanche (Paris)
- "2114 : A Century of Physics and Magics" (what would physics look like if magic was real ?)
 - 🏆 Awarded by Diagonale Paris-Saclay (Curiositas 2014), and special price for "scientific fiction" by S[cube]
- "The Quest of Ultra-low Temperatures"
- "A century of Quantum Mechanics, from the lab to daily life"
- "All is energy - how to fit 160 cyclists in your pocket"

Scientific curator

for the exhibition *Photonfutur* dedicated to photovoltaic resources.

ESPCI (Paris)

📅 2016

Communication group

Website renovation, press release, lab presentations, fête de la Science

Lab. Kastler-Brossel (ENS Ulm)

🏆 Invited to talk at "Journées Nouveaux Entrants CNRS" (JEPHY 2015)

📅 2014–2015

Scientific blogger - "L'actu des sciences"

Monthly science news illustrated by science fiction.

ActuSF edition

Available at www.actusf.com/spip/L-actu-des-sciences

📅 2012–2014

..... Project management

Emergent Scientist (EmSci)

A hands-on open-access journal to train students to peer-review publication

Founder and Editor in chief

EDP Science

📅 Since 2016

Young Physicists Meeting (RJP)

Physics conference for and by PhD students

Assistant treasurer (100 participants, 15 000€ budget)

French Physical Society

📅 2014

International Physicists' Tournament (IPT)

Student competition on open problems involving 21 countries.

French Physical Society

📅 Since 2013

- Member of the Executive Committee (since 2016)
- Vice president for the 8th edition (2016, 120 participants from 15 countries, 110 000€ budget)
- Founder of the French Physicists' Tournament (2014)
- First French representative and Team leader of the French team (2013-2015)

PhD in Physics


Major : quantum mechanics

Université Pierre-et-Marie-Curie (Paris) 2016**Engineer degree**


Academic promotion X2008, Multidisciplinary scientific training

École polytechnique (Palaiseau) 2012**Master 2**


International Centre for Fundamental Physics, Quantum Physics

École Normale Supérieure (Paris) 2011–2012**Summer school**

Quark and Gluon Plasma with the ALICE collaboration

CERN (Geneva) July–Aug 2011**Master 1**

High Energy Physics

École polytechnique (Palaiseau) 2010–2011

- French (Mother tongue)

- German (Intermediate)

- English (Fluent)

- Japanese (Basics)