

# Rémi Dupuy

*Post-doctoral Researcher*

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[Google Scholar profile](#)

## Research fields

- Fields: Chemical physics of interfaces; Irradiation processes.
- Contexts: Astrochemistry; Atmospheric physico-chemistry.
- Systems: Solid-gas interfaces; Liquid-vapor interfaces; Aqueous solutions; Molecular thin films.
- Techniques: VUV and X-ray action spectroscopie; Ambient pressure XPS; Mass Spectrometry; REMPI spectroscopy; Infrared spectroscopy; Ultra-high vacuum; Langmuir monolayers; Synchrotron radiation (VUV, X); Electron irradiation; Cryogenics.

## Education

- 2016-2019 **PhD thesis**, *Sorbonne Université, Laboratoire d'Etudes du Rayonnement et de la Matière en Astrophysique et Atmosphères (LERMA)*, Director: Jean-Hugues Fillion.  
Photon- and electron-induced desorption from molecular ices. Defended 10/10/2019.
- 2015-2016 **Master (M2)**, *Institut d'Optique Graduate School (IOGS)*, spécialité: Optique, Matière, Plasma. Diplôme d'ingénieur de l'IOGS.
- 2012-2015 **Engineer degree**, *Ecole Supérieure de Physique et de Chimie Industrielles de la ville de Paris (ESPCI)*.
- 2010-2012 **Prep classes**, *Lycée du Parc, Lyon*.

## Research experience

- 2019- **Post-Doc**, *Fritz-Haber Institute of the Max Planck Society (Department of Inorganic Chemistry)*, Berlin (Allemagne), Group of Hendrik Bluhm.  
Reactions, transport and repartition of molecules at the liquid-vapor interface studied at the molecular level. Funded by a postdoctoral grant of the Alexander von Humboldt Foundation since 10/2020.
- 2016-2019 **PhD**, *Sorbonne Université, Laboratoire d'Etudes du Rayonnement et de la Matière en Astrophysique et Atmosphères (LERMA)*, Paris (France), Director: Jean-Hugues Fillion.  
Photon- and electron-induced desorption from molecular ices. Funded through a collaboration with CERN. 8 months total research trips at CERN.
- 2016 **Master 2 internship**, *Sorbonne Université*, Paris (France), Supervisor: Jean-Hugues Fillion.
- 2015 **Internship (2 months)**, *Institut Langevin*, Paris (France), Supervisor: Yannick Dewilde.
- 2014 **Internship (6 months)**, *NTT Basic Research Laboratories*, Atsugi (Japan), Supervisor: Imran Mahboob.

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## Scientific production

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| Publications in peer-reviewed journals                | 10 |
| As first author                                       | 6  |
| Proceedings and others                                | 3  |
| Talks in international conferences (as speaker)       | 5  |
| Invited talks   | 1  |
| Talks in national conferences and workshops (invited) | 1  |
| Invited seminars                                      | 3  |
| Posters   | 8  |
| Outreach articles                                     | 2  |

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## Distinctions & projects

- Prize** 2020 PhD prize of the french Division de Chimie Physique (SCF and SFP)
- Funding and project**
- Humboldt Research Fellowship for Postdoctoral Researchers grant (beginning October 2020, 2 years).
  - Synchrotron beamtime (as coordinator of the project):
    - BESSY synchrotron, UE52 beamline (144h, 1st semester 2021).
    - SOLEIL synchrotron, PLEIADES beamline (120h, 1st semestee 2021)
- Qualification** Qualifié aux fonctions de maître de conférences en sections 30 et 31 (2019)

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## Teaching, supervision and diffusion

- Teaching** 202h of teaching over 3 years as a PhD at Sorbonne Université.
- Thermodynamics (**1st year, 1x38h**)
  - Electromagnetism and Electrokinetics (**2nd year, 2x40h**)
  - Electromagnetism and Optics (**3rd year, 3x28h**)
- Supervision**
- Co-supervisor (50%) of two 3rd-year interns - (2 weeks, January 2017).
  - Co-supervisor (50%) of one 4th-year intern - (2 months, May-June 2018).
- Outreach**
- Outreach article in l'Actualité Chimique (published by SCF) on my PhD topic (to be published, 2021).
  - Outreach article [on an online blog \(Le Rayon, SFP\)](#), on my PhD topic (2018).
  - "Fête de la Science" 2017 and 2019 (demo experiments, presentation of the lab to middle-schoolers and the general public).

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## Organization

- Conferences**
- Co-organization (33%) of an online mini-symposium (4h, 01/03/2021) for the annual DPG-FVO conference (science surface division of the German Physical society). Theme: "Molecular scale investigations of liquid-vapor interfaces".
  - Member of the LOC of the international conference "The Hydride Toolbox" (12-15/12/2016, Paris)