

CURRICULUM VITAE

Dr Noémie Globus

Updated: September 2022

Personal Details

b. Paris, France, October 6, 1983

Married to Guillaume, mother to Lou

Languages: French: native. English, Polish: fluent. Spanish: notions. Hebrew: beginner.

Education

Qualification for Lecturer Functions Sections 29 (elementary constituents of matter) and 34 (astronomy and astrophysics), French Ministry of National Education

2008-2011 Ph.D. (3 years in France) in Astronomy, Astrophysics and Space Science, Observatoire de Paris

2006-2008 M.Sc. in Astronomy, Astrophysics and Space Science, Observatoire de Paris

2002-2006 B.Sc. Physics, University Paris VI, Ecole Nationale Supérieure de Cachan, Department: Physique

Employment History

Current Postdoctoral and Visiting Positions

Since 2021: Chancellor's Postdoctoral Fellow, University of California, Santa Cruz

2019-2025: Visiting Scientist, Astrophysical Big Bang Laboratory, RIKEN

Past Postdoctoral and Visiting Positions

2019-2022: Guest Researcher, Center for Computational Astrophysics, Flatiron Institute (joint with New York University in 2019-2020), USA

2021 (8 months): Postdoctoral Fellow, ELI Beamlines, Czech Republic

2018: Visiting Postdoctoral scholar, KIPAC, Stanford University, USA

2015 – 2018: Postdoctoral Fellow, The Hebrew University, Israel

2012 – 2015: Postdoctoral Fellow, Tel Aviv University, Israel

Awards, Citations, Honors, Fellowships

2018-2020 Koret Fellowship (KIPAC, Stanford University, USA)

2015-2017 Lady Davis Fellowship (The Hebrew University, Israel)

Publications

- 28 peer-reviewed papers (25 with 5 authors or less, 16 as first author)
- Invited news items in Nature, Quanta Magazine and Scientific American
- Topical convener for: "Ultra-High-Energy Cosmic Rays: The Intersection of the Cosmic and Energy Frontiers", Submitted to the US Community Study on the Future of Particle Physics (Snowmass 2021), arXiv.2205.05845

Invited Talks

26 invited talks at international conferences More than 70 invited seminars/colloquia at world-class research institutes (Full list available upon request)

Professional Service Activities

- **Grant panelist**
 - the French National Research Agency (ANR)
 - the National Aeronautics and Space Administration (NASA)
 - the Israel Science Foundation (ISF)
- **Referee**

Science (Science), Physical Review Letters (PRL), Physical Review D (PRD), The Astrophysical Journal (ApJ), Monthly Notices of the Royal Astronomical Society (MNRAS), Journal of Cosmology and Astroparticle Physics (JCAP), ACS earth & space chemistry
- **Chair, International Conferences**
 - Nuclear Astrophysics & Cosmic Rays in the Multimessenger Era, ICISE, Quy Nhon (Vietnam), July 25-29, 2022
 - High Energy Astrophysics Israel Japan Workshop, RIKEN, Wako and Kobe Campus (Japan), July 18-23, 2019
- **Organizer, International Conferences**
 - IAUS 375: The multimessenger chakra of blazar jets, 5-9 December 2022, Nepal, Kathmandu (LOC)
 - 31st Texas Symposium on Relativistic Astrophysics, 12 - 16 September, 2022 / Prague, Czech Republic (LOC)
 - TMEX-2020: Theory meeting experiment: particle astrophysics and cosmology, ICISE, Quy Nhon (Vietnam), 6-11 January 2020 (SOC)
 - VHEPU-2018: Very High Energy Phenomena in the Universe, ICISE, Quy Nhon (Vietnam), 12-18 August 2018 (SOC)
 - High Energy Astrophysics Workshop (Feb. 28, 2017) at the Hebrew University (Israel) (SOC)

- **Member of the UCSC Astronomy & Astrophysics Colloquium committee** for the 2022-2023 academic year.
- **Organizer of the monthly UCSC Astrobiology Colloquium** for the 2022-2023 academic year.
- **Organizer of the weekly "astrolunch" Astronomy seminar**, the Hebrew University of Jerusalem (Israel): academic years 2016-2017 and 2017-2018.
- **Membership**
 - Telescope Array Collaboration
 - International Astronomical Union (IAU)
 - The Extreme Non-Thermal Universe: CDY Initiative
 - Astrobiology Initiative, UC Santa Cruz
 - Women in Physics, New York University (2019-2020)
- **Elected Students Representative**, Doctoral school of Astronomy and Astrophysics of Paris (2009-2010)

Teaching and Mentoring Experience

- **2022-2023: Temporary Lecturer in Astronomy** (Winter quarter) to redesign and teach the "ASTR 117 High Energy Astrophysics" class for advanced undergraduate students at UCSC.
- **Temporary Lecturer ("ATER" position) in France, courses taught:**
 - nuclear magnetic resonance (Paris Observatory and Université Paris VI)
 - special and general relativity (Paris Observatory and Université Paris VI)
 - solar optics and spectroscopy (Paris Observatory)
 - dynamics of dilute gases and plasmas (Paris Observatory)
 - imagery post-processing (Paris Observatory)
 - far-infrared detection (Paris Observatory)
- **Teaching Assistant during PhD, for courses:**
 - introduction to astronomy and astrophysics (Paris Observatory)
 - programming in IDL (Paris Observatory)
 - supervisor of observations at Solar Tower (Paris Observatory)
 - undergraduate student training
 - a e-learning instructor in astronomy
- **Selected Mentoring Activities**
 - Currently mentoring: Vanessa Mendoza ([LAMAT](#) program) and Caitlyn Nojiri ([UC LEADS](#) program). The majority of students in these programs come from historically marginalized groups in STEM.

Vanessa is participating in our experiments on chiral light-DNA interactions to investigate the possible role of polarized radiation in the emergence of biological homochirality.

Caitlyn is modeling the diffusion of cosmic rays in the local bubble and seek signatures of elevated radiation doses in the past to understand if they could have impacted the biological makeup of living species.

- Chen Ding (The project was to interpret the dipole anisotropy of ultra-high energy cosmic rays. Duration: 2 years, lead to his first-author publication in *ApJL* ([publications](#)) and press release in *Quanta Magazine*)

Selected Outreach Activities

2018 Public outreach activities at San Matteo College (USA)

2013-2014: Public outreach activities at Wise Observatory (Israel)

2008-2011: Public outreach activities at Paris Observatory (open nights, outreach lectures, mentoring of astronomy projects in schools) and Palais de la Découverte (France)

2002-2007: Co-founder of the association for Astronomy of Paris XI University (France)

Selected Observing Experience

2022: Night Shift, Telescope Array Experiment

2011-2013: Observations at Telescope Bernard Lyot, Observatoire du Pic du Midi (21 nights). Advisor: Dr Rémi Cabanac. Instrument: NARVAL (spectropolarimeter)

2008: Training period of observing and data reduction at the Observatoire de Haute Provence (1 week), France.

2006: Training period (observations, data analysis) at the Canada France Hawaii Telescope (3 weeks at the summit). Advisor: Dr Christian Veillet. Instrument: WIRCam.