

Solène Lejosne**EMPLOYMENT**

2016 – Present	University of California, Berkeley	Assistant Researcher
2014 – 2016	University of California, Berkeley	Postdoctoral Scholar
2013 (6 months)	British Antarctic Survey, Cambridge	Res. Assistant
2010 – 2013	University of Toulouse, France	Ph.D. Student
2009 (3 months)	Swedish Institute of Space Physics	Undergrad Res. Assistant

EDUCATION

2010-2013 (2013)	University of Toulouse – Paul Sabatier, France <i>Doctor of Philosophy Degree in Astrophysical and Space Sciences</i>
2009-2010 (2010) (2010)	ISAE-SUPAERO, Toulouse, France <i>Master of Science in Aerospace Engineering (Major: Space Systems)</i> <i>Master of Science in Astrophysics, Space Physics & Planetary Science</i>
2006-2010 (2010) (2009) (2008)	École Polytechnique, Palaiseau, France <i>Diplôme de l'École Polytechnique</i> <i>Diplôme d'Ingénieur</i> <i>Bachelor of Science (Major: Physics and Mechanics for the Environment)</i>

AWARDS AND HONORS

NASA GRANTS: PI (3), Co-I (1), and Collaborator (1)

2022-2025	(PI) NASA HTIDeS Award #80NSSC22K0640 “ <i>Development of Grotifer: a CubeSat for Three-dimensional Electric Field Measurements</i> ”.
2021-2022	(Collaborator) NASA Heliophysics Mission Concept Studies Award #80NSSC22K0110: “ <i>PILOT (Plasma Imaging Local and Tomographic experiment) Mission Concept Study</i> ”. P.I.: D. Malaspina, UC Boulder, LASP
2021-2024	(Co-I) NASA GI Open Grant Award #80NSSC21K0734 “ <i>Using Particle Measurements to Infer Inner Magnetospheric Electric Fields</i> ”. P.I.: S.Claudepierre, UCLA
2020-2023	(PI) NASA HSR Grant Award #80NSSC20K1351 “ <i>Quantifying the impact of neutral winds in driving plasma dynamics in the Earth’s inner magnetosphere</i> ”.
2018-2022	(PI) NASA HSR Grant Award #80NSSC18K1223 “ <i>Reassessing plasma transport in the Earth's inner magnetosphere</i> ”.

OTHER AWARDS AND HONORS (since 2020)

- 2021 May 2020 Editors' Citation for Excellence in Refereeing for JGR Space Physics (top 1%)
- 2020 Aug Young Scientist of the Van Allen Probes mission (among 7)
- 2020 May Single-authored paper "Analytic Expressions for Radial Diffusion" selected as one of the editors' picks in the first AGU Advances digest
- 2020 Apr 2019 Editors' Citation for Excellence in Refereeing for JGR Space Physics (top 1%)
- 2020 Apr Top 10% most downloaded papers published in JGR Space Physics, 2018-2019 (two articles in the top 10%)

PUBLICATIONS

30 PEER-REVIEWED PUBLICATIONS, 20 FIRST-AUTHORED (5 most recent below – full list available on personal website)

1. Lejosne, S., B.G. Fejer, N. Maruyama, and L. Scherliess (2022), Radial Transport of Energetic Electrons as Determined from the "Zebra Stripes" Measured in the Earth's Inner Belt and Slot Region, *Front. Astron. Space Sci.*, doi:10.2289/fspas.2022.823695
2. Lejosne, S., Bonnell, J. W., Wygant, J. R., & Mozer, F. S. (2022). Maximizing the Accuracy of Double Probe Electric Field Measurements near Perigee: The Case of the Van Allen Probes Instruments. *Journal of Geophysical Research: Space Physics*, 126, e2021JA030099.
3. Lejosne S, Fedrizzi M, Maruyama N and Selesnick RS (2021) Thermospheric Neutral Winds as the Cause of Drift Shell Distortion in Earth's Inner Radiation Belt. *Front. Astron. Space Sci.* 8:725800. doi: 10.3389/fspas.2021.725800
4. Lejosne, S. and F.S. Mozer (2020), Inversion of the Energetic Electron "Zebra Stripe" Pattern Present in the Earth's Inner Belt and Slot Region: First Observations and Interpretation, *Geophys. Res. Lett.* e2020GL088564 <https://doi.org/10.1029/2020GL088564>
5. Lejosne, S. and F.S. Mozer (2020), Experimental Determination of the Conditions Associated with "Zebra Stripe" Pattern Generation in the Earth's Inner Radiation Belt and Slot Region. *J. Geophys. Res. Space Physics.* <https://doi.org/10.1029/2020JA027889>

SYNERGISTIC ACTIVITIES

1. REVIEWER: NASA Proposal (mail-in review + panelist), Journals (*Journal of Geophys. Res.*, *Space Physics*, *Geophys. Res. Lett.*, *Ann. Geophys.*), Book (Roederer & Zhang, 2014)
2. SESSION: AGU FALL MEETING 2019 "Waves, Plasma, and Convection in the Subauroral Geospace", Session Chair
3. STUDENT SUPERVISION (Since 2019):
Fira Fatmasiefa (UC Berkeley phys. undergrad, Spring 2021-Spring 2022)
Shimaila Mansoor (REU Community College Student, Summer 2021)
Elicia Tiano (UC Berkeley phys. undergrad, Summer 2019-Summer 2020)
Myles McAvoy (UC Berkeley phys. undergrad, Summer 2019)