Maxime GRANDIN (he/him)

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Citizenship: French and Finnish

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Education

2013–2017 **Double PhD degree in Space Physics**, awarded on 21 Dec 2017
University of Oulu Graduate School (Finland) and Université Toulouse III Paul Sabatier (France)
– Included a semester (Jan–May 2015) taking MSc/PhD-level Arctic Geophysics courses at the **University Centre in Svalbard (UNIS)**

2009–2013 **Double Master's degree** in Space Physics and Space Engineering, awarded on 24 Oct 2013
Institut Supérieur de l'Aéronautique et de l'Espace (ISAE) and Université Toulouse III (France)
– MSc in Astrophysics, Space Science and Planetology (*Mention TB*, highest grade)
– "*Diplôme d'ingénieur*" SUPAÉRO, majors in Space Engineering and Numerical Simulation

Current position

2021– **University of Helsinki** (Finland) – Academy of Finland grant 338629-AERGELC'H
Academy of Finland postdoc in space physics (current contract 1 Oct 2021–30 Sep 2024)
– Investigation of particle precipitation with the Vlasiator magnetospheric model
– Quantification of global energy input into the ionosphere during magnetospheric substorms
– Evaluation of substorm effects on local atmospheric chemistry at high latitudes

Previous work experience

2018–2021 **Postdoctoral researcher** at the University of Helsinki (Finland)
– Survey of particle precipitation with the Vlasiator magnetospheric model
– Analysis of citizen scientists' photographs to study a new form of aurora, the "dunes"
– Member of the Daedalus spacecraft (ESA phase-0 mission) Science Team

2013–2017 **PhD student** at Sodankylä Geophysical Observatory (SGO; Finland) and IRAP (France)
– Studies of the effects of solar wind high-speed streams on the ionosphere
– Development of ionospheric and radio-wave propagation numerical models

2013 (6 months) **Research assistant** at IRAP (Toulouse, France) and ESA/ESTEC (Leiden, Netherlands)
– Master's thesis on simulation of radio-occultation experiments between the Earth and Mars

2012 (7 months) **Research assistant** at Sodankylä Geophysical Observatory (Finland)
– Ionospheric data processing and absolute geomagnetic field observations

Research funding and grants

2022 Travel grant, Vilho, Yrjö ja Kalle Väisälä Foundation (4000 EUR)

2021 **Postdoctoral researcher funding**, Academy of Finland (243,290 EUR)
– Three-year funding to carry out research independently (grant 338629-AERGELC'H)

2020 Travel grant, Magnus Ehrnrooth Foundation (1200 EUR)

2016–2017 **Doctoral training funding**, University of Oulu Graduate School (UniOGS; 54,000 EUR)
– Two-year funding from an Exactus-DP grant

2014–2017 Travel grants, University of Oulu Graduate School (5 grants, total: 6961.70 EUR)

Teaching and pedagogical competence

Lecturing

2018–	Guest lecturer for various space plasma physics courses, University of Helsinki – Advanced Space Plasma Physics: Lectures, tutorials and exercises on ionospheric physics and ground-based observational methods including incoherent scatter radars – Basic Space Plasma Physics: Lecture on macroscopic plasma description and MHD – Space Applications of Plasma Physics: Lecture on ionosphere and MI coupling
2020	Guest lecture (BSc level) on the aurora and space weather, IPSA engineering school, France
2018	Teaching assistant for the Space Applications of Plasma Physics course, University of Helsinki

Pedagogical training

2021	University Pedagogy 1 course completed at the University of Helsinki, Finland (5 ECTS credits)

Course design

2023	MOOC on Sustainable Space (alongside 3 colleagues), University of Helsinki

Student supervision

2021	Thijs Luttikhuis (MSc thesis), University of Helsinki, Finland
2020	Lotta Poltto (BSc) and Simo Lehtinen (MSc thesis), University of Helsinki, Finland

Awards and honours

2021	2020 **Editors' Citation for Excellence in Refereeing**, *AGU Advances* journal
2020	Winner of the EGU Photo competition 2020, European Geosciences Union

Other key scientific or academic merits

2021	**External Reviewer** of a NASA GDC IDS Program proposal (USA)
2019	**External Reviewer** of a NSERC Discovery Grant proposal (Canada)
2019	**Sollicited tutorial** on space weather effects on spacecraft at ICEYE startup, Espoo (Finland)
2019–2020	Member of the Daedalus satellite mission Science Team
2017–	**Peer-reviewer** in space physics – Scientific journals, incl. *JGR Space Physics*, *Geophysical Research Letters*, *AGU Advances*, *Journal of Space Weather and Space Climate*, *Annales Geophysicae*, *Space Weather*, *Earth and Planetary Physics*, *The Astrophysical Journal* – Textbook chapters for *AGU Books*
2015–2016	Graduate student representative for the SGO research development committee (TETR)
Outreach	Various activities in schools and in popular science events since 2016 45 posts on the Sodankylä Geophysical Observatory blog (https://blog.sgo.fi)

Memberships and positions of trust in scientific societies

2023–	Member of the Sustainability Working Group of E-SWAN
2023–	Member of the Diversity, Equity & Inclusion Working Group of E-SWAN
2022–	Member of the Young Academy Finland (*Nuorten Tiedeakatemia*)
2021–	Member of the Finnish EISCAT Coordination group
2021–	Early-Career Scientist Representative for the Solar-Terrestrial Division of EGU
2019–	Member of the Early-Career Scientist Team of the Solar-Terrestrial Division of EGU
2019–	Secretary of the Astrophysics and Space Physics Division in the Finnish Physical Society
2018–	Member of the European Geosciences Union (EGU), Germany
2016	Member of the American Geophysical Union (AGU), USA