

Curriculum vitae

Name : Barthelemy

First name : Mathieu

Birth date : 04 march 1972

Professor (1st class) since September 2019 ; CNU Section 34

Postal Professional Adress : IPAG, 414 rue de la piscine, BP 53 ; 38041 Grenoble Cedex 9 ; France

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Last diploma :

- Agrégation Physics and Chemistry; option physics : July 1996

- PhD : Decembre 2003

Title : Modelling of the radiative transfer in Jupiter and Saturn upper atmosphere. Resp : J. Lilensten.

- HDR (Accreditation to Supervise Research) : June 2011

Title : Thermospheric and ionospheric planetary emissions

Professional functions:

1996-1997 : Teacher « agrégé stagiaire » « Lycée du Parc » in Lyon(69, France)

1997-1998 : National Service ; Scientist. ONERA-CERT/ DMAE (Toulouse, France)

1998-1999 : Teacher in « Lycée Jean Vilar » in Meaux (77, France)

1999-2004 : « Prag » in IUT 1 of Grenoble (PhD in parallel from 2000 to 2003).

2004-2019 : Associate professor UFR Phitem/IPAG

2019-....: Professor UFR Phitem/IPAG

Responsabilities :

- **Maison pour la science Alpes Dauphine, scientific director from 2021 to 2025.**

- **Grenoble University Space Center (CSUG) deputy director since 2021 (Director from 2015 to 2021).**

- Research :

- Vice Chairman of the COST action « polarization as a tool to study the solar system and beyond ». French representative in the Management Committee. 2011-2015.

- PI of the spectropolarimeter « premier cru » to measure the polarisation of the visible auroral spectra.

Co-PI of the ASIS spectrometer. PI of the tomaurora program included in the PLI instrument

- **PI of the ATISE-Wind space instrument (Wind measurement ; R&T CNES).**

- **PI of the AMICal Sat (2U) space mission (Auroral Imagery ; Launched 09/2020).**

- **Instrument scientist of WFAI (ESA,D3S, Aurora D and C)**

- Teaching

- Responsible of the master degree A2P (Astrophysics, Plasmas, Planets) from 2011 until Sept 2015

- Former responsible of more than 10 UE (Teaching Units) including :

M2 A2P Planetology.

L3 PC : Electromagnetism

And Numerical analysis, fluid mechanics,...

- Administration

Responsible from 2006 to 2009 of the communication in OSUG.

Grenoble representative in the orientation Council of the R2A2 network.

Deputy elected representative in the CTP of the UJF (2010-2011)
Elected representative to the science Council of the UJF (From March 2012 to 2015)
Elected representative in the Council of the PAGE Pole (2015-2019)
Member of the office of the Physics doctoral school (Since 2021)

Intern and PhD students

>60 interns (M2/M1/L3/IUT)

PhD students

- Hélène Menager (Sept 2008- July 2011) :co-leading. 80%. Defense July 2011.
- David Bernard (Octobre 2011- 2014) : co-leading 40%. Defense June 2014.
- Anne Vialatte (Oct 2014-Oct 2017) : full responsible 100%. Defense Oct 2017.
- Elisa Robert (Nov 2019-Mar 2023): Full responsible 100% Defense Mar 2023
- Simon Bouriat (Nov 2020-Dec 2023): Half responsible 50%, Defense Dec 2023
- Samuel Reboud Maquin (Oct 2025-...): full responsible.

Research Thematics

- Planetary Ionosphere/ Thermospheres.
- Aeronomy, Northern Lights.
- Emissions mechanisms
- Radiative Transfer in atmospheres
- Light Polarisation
- Space weather
- Nanosatellites/ cubesats
- Space Instrumentation
- Modelling

69 publications. 2 submitted

15 publications in teaching or mediation domain (14 In French. 1 in English)

Seminar and conferences

- More than 100 talks in international conferences (SF2A, EGU ;AGU ;IAGA, EPSC; DPS; Astropol, ESSW, ESLAB, ...).
- 23 laboratory invited seminars
- Convener or Co-convener of sessions: AGU 2011, EGU 2012, EGU 2013, EGU 2017, EGU 2025.
- Co-Convener of sessions: ESWW 2013, ESWW 2015.

Expertises

Review in « Advanced in Space Research », « Annales Geophysicae », « Planetary and Space science », « Journal of Geophysical Research », Icarus, JMASS,...

18 PHD committees, 1 HDR committee.