

**Name:**

Alessandro Battaglia

**Date and place of birth:**

02/04/1972, Treviso (TV), Italy.

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**Academic career**

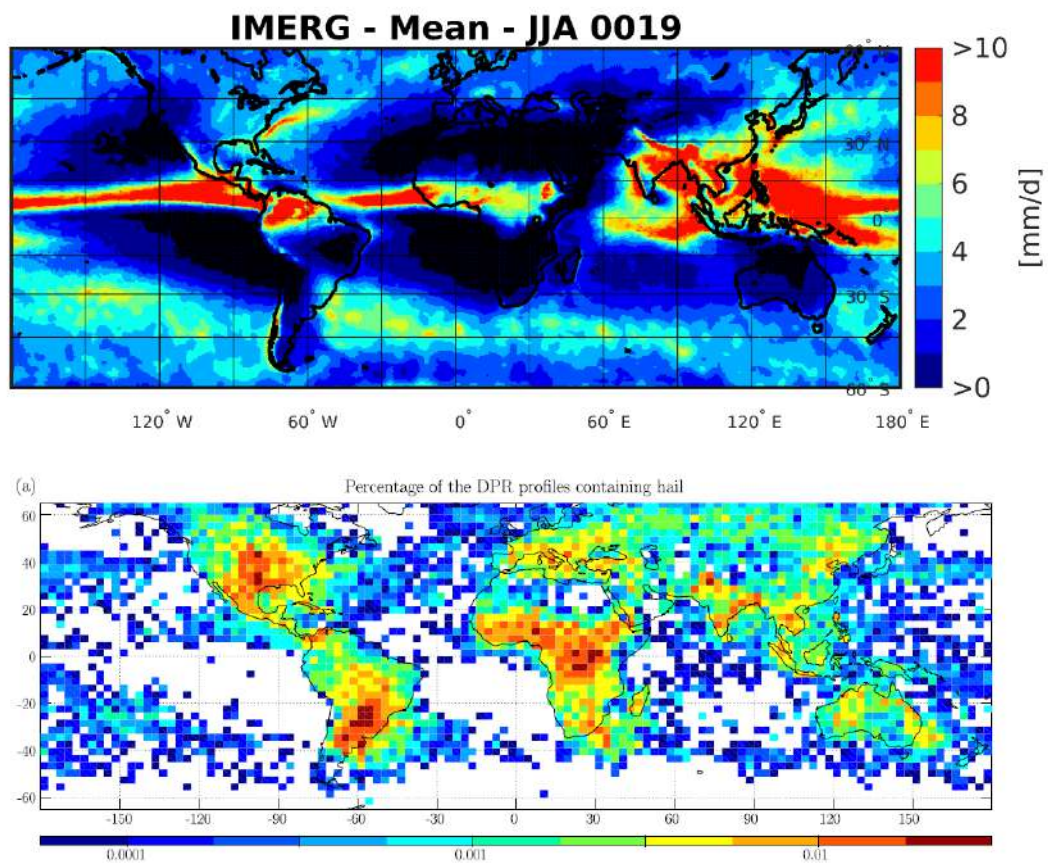
- *Associate Professor*, DIATI, Politecnico di Torino, Torino (from January 2020).
- *Associate Professor*, Physics and Astronomy Department, University of Leicester, UK (from April 2013).
- UKSA-CEOI Science co-Director (appointment from April 2018 to December 2019)
- ``*Privat Dozent*'' equivalent to Visiting Professor (from May 2012 to May 2016), Meteorological Institute, University of Bonn, Faculty of Mathematics and Natural Science, Germany.
- *NERC peer review college member* (from May 2011).
- *Lecturer* (Sept. 2009-March 2013), Physics and Astronomy Department, University of Leicester, UK.
- *Assistant Professor* (Sept. 2004-Aug.2009), Meteorological Institute, University Bonn, Germany.
- *Contract Professor* of the Course Laboratory of Radiative Transfer (years 2003-2004), University of Ferrara and at a master course in Meteorology, University of Bologna, Italy.
- *Contract Professor* at a master course in Meteorology (year 2004), University of Turin, Italy.
- *Contract Professor* at a master course in Meteorological Risks for Aviation Navigation (year 2004), University of Forli', Italy.
- *Research Associate* (Jan. 2003-Aug. 2004), Department of Physics, University of Ferrara, Italy.
- *Visiting PDRA* (Apr. 2001-Dec. 2001), Department of Atmospheric Sciences, CSU, USA.
- *PDRA* (Nov. 2000-Nov. 2002), Dep. of Aerospace Eng., University of Bologna, Italy.
- *Visiting Fellow* (Sept. 1999-Apr. 2000), NASA GSFC, Greenbelt, Maryland, USA.
- *Visiting Fellow* (Sept.-Oct. 1998), Helsinki Observatory, Helsinki, Finland.



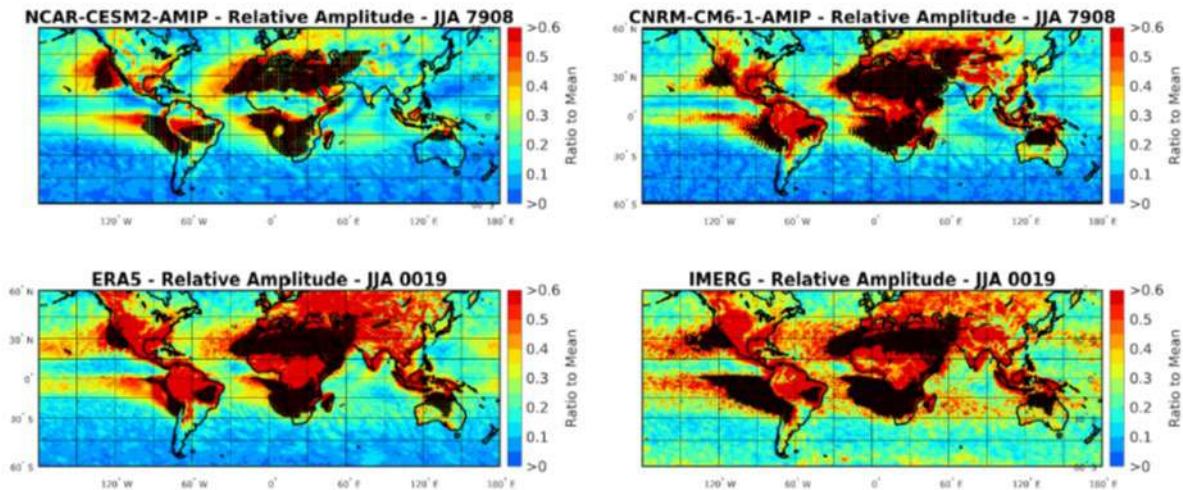
## Design of the next generation of remote sensing sensors



## Climatology of precipitation and extreme events



## Validation of climate simulations



### Publication

All publications are available at

[https://scholar.google.com/citations?user=Ob6UR\\_oAAAAJ&hl=en](https://scholar.google.com/citations?user=Ob6UR_oAAAAJ&hl=en)

### Current research grant

1. Dr. Battaglia is co-I of the ESA Wivern II project, a 18 month to refine the concept for a Doppler radar. *Budget: 250.000 € (85,000 budget for PoliTO). Duration: from 1/6/2019 to 30/12/202.*
2. Dr Battaglia is the Leicester PI of the ESA project **Raincast**, a 18-month project in partnership with McGill University, CNR-Rome and NRC Canada focused at studying the next generation of radar and radiometer for observation of precipitation. *Budget: 250.000 € (75,000 budget for Leicester). Duration: from 5/1/2019 to 30/9/2020.*
3. Dr Battaglia is the PI (co-I A. Fridling, NASA GISS and Dr. D. Kneifel, University of Cologne) of the project **Ice processes in Antarctica: identification via multi-wavelength active and passive measurements and model evaluation** funded by US-Department of Energy within the Atmospheric System Research program from 9/17 to 9/21 to study clouds over Antarctica during the AWARE field campaign. *Budget: 400.000 \$. Duration: from 1/9/2017 to 30/8/2020.*
4. Dr Battaglia is the PI of the project **NCEO Radiation and Rainfall** funded by the UK National Center for Earth Observation focused at preparation studies for the EarthCARE mission. *Budget: 395.352£ (fully recoverable from funder). Duration: from 1/10/2014 to 31/2/2021.*
5. Dr Battaglia is the co-I of the CEOI grant **GRACE (G-band RADar for Cloud Experiment)**, a 18-months project focused at building a 200 GHz radar for cloud studies Budget 70.000 £ (56.000 £ recoverable from funder). *Duration: from 1/5/2018 to 30/11/2020.*

Other appointments:

- **Member of the ESA EarthCARE mission advisory group** (since May 2017);
- **Member of the ESA SKIM mission advisory group** (January 2018-Aug 2019);
- **International collaborator** in the ‘Advanced datasets to diagnose higher-order features embedded in expected GPM measurements and their impact on retrieval algorithms’ project

part of the NASA ROSES Precipitation Science Research Program and led by Dr S. Tanelli, NASA-JPL. *No budget allocated, only per diem and travel money for visiting JPL.*

- **International collaborator** in the ‘Using Airborne Radar Measurements to Improve Physical Assumptions in DPR and GMI Algorithms’, project part of the NASA ROSES Precipitation Science Research Program and led by Dr G. Heymsfield, NASA-Goddard. *No budget allocated, only per diem and travel money for visiting JPL.*
- **Member of the Advisory Board** of the project Life 15 CCA/IT/000035 “RainBO Life” funded for the years 2016-2018;
- **Member of the NASA Precipitation Measuring Mission Science Team** (*since 2008*).

### Other academic distinctions

- UK NCEO Member since 2014
- Professor Habilitation at the University of Bonn, Faculty of Mathematics and Natural Sciences with a thesis on ‘Multiple scattering effects in radar systems: theory, modelling and observations’ (January 2011).
- On the 25<sup>th</sup> January 2011, with the talk ‘‘The cloud-aerosol interaction: relevance for climate change’’ he completed the German *Professor Habilitation* at the University of Bonn, Faculty of Mathematics and Natural Sciences.
- On the 23<sup>rd</sup> May, 2012 during the Dies Academicus of the University of Bonn, Dr. Battaglia gave his inaugural lecture ‘‘How much does it rain over the globe? Present and future’’. Since then he has been *Privat Dozent* at the University of Bonn, with teaching and supervision duties.
- Dr. Battaglia is *review editor* for the Frontiers in Earth Science, Environmental Science and Physics Journal and *associate editor* for the AMS Journal of Atmospheric and Oceanic Technology and *member of the Editorial Board* of the MDPI journal Atmosphere (ISSN 2073-4433) section ‘Climatology and Meteorology’.
- Dr. Battaglia is *reviewer* for the Journal of Geophysical Research-Atmospheres, the Journal of Quantitative Spectroscopy and Radiative Transfer, the Quarterly Journal of Royal Meteorological Society, Atmospheric Research, Applied Optics, IEEE Geoscience and Remote Sensing Letters, Meteorology and Atmospheric Physics.
- He is *NERC peer review college member*. In August 2012 he was *grant reviewer and panel review member* for the selection of the NASA Precipitation Measurement Missions Science Team (reference number NNH12ZDA001N-PMM).
- April 2015: as part of the GPM GV team Dr. Battaglia has been awarded the *NASA Goddard Space Flight Center Robert H. Goddard Award (Team) for the category of Exceptional Achievement in Science in 2014* for creative development and use of validation data for GPM from surface-based sensors and four highly successful field campaigns.
- May 2015: as part of the GPM Post-Launch Team Dr. Battaglia has been awarded the *NASA Agency Group Achievement Award* with a citation reading ‘‘For exceeding all expectations for GPM operations, data processing, algorithm performance, science impact, and education and public outreach within one year after launch.’’
- Programme Committee Member of ERAD 2016 and of the 2018 NCEO-CEOI Conference.
- ‘Abilitazione Scientifica Nazionale in Prima e Seconda Fascia per la classe SC: FIS/06 FISICA PER IL SISTEMA TERRA E PER IL MEZZO CIRCUMTERRESTRE (May 2018)
- ‘Abilitazione Scientifica Nazionale in Prima e Seconda Fascia per la classe SC: 04/A Earth Sciences from the Italian MIUR (May 2019)