



WORK EXPERIENCE

University of Bologna, Radio Science and Planetary Exploration Laboratory Italy

Postdoctoral Research Fellow

01/10/2024 – Current

University of Bologna, Radio Science and Planetary Exploration Laboratory Forlì, Italy

PhD Student

01/11/2021 – 21/03/2025

- **Thesis:** Monostatic and Bistatic Radar Techniques for Planetary Surface Exploration across the Solar System
- **Supervisors:** Prof. Paolo Tortora, Prof. Marco Zannoni

Stanford University, Radio Glaciology Laboratory Stanford (CA), United States

Visiting Student Researcher

01/02/2024 – 31/05/2024

Investigation of coherent and incoherent scattering from Mars South Polar cap as observed by MRO SHARAD: SHARAD

Cornell University, COMPASSE Research Group Ithaca (NY), United States

Visiting Researcher

10/11/2022 – 15/12/2022

Data analysis of Cassini bistatic radar observations of Titan's polar seas: Ligeia, Kraken and Punga Mare

Radio Science and Planetary Exploration Laboratory, University of Bologna Forlì, Italy

Curricular Internship

10/01/2021 – 01/06/2021

Topics & Activities

- Overview of bistatic radar experiments for planetary surface exploration
- Signal processing: downscaling, sampling, decimation, frequency analysis
- Open loop recordings for radio science experiments in deep space

EDUCATION AND TRAINING

01/11/2021 – 21/03/2025 Forlì, Italy

PhD in Aerospace Science and Technology Alma Mater Studiorum - University of Bologna

Website <https://www.unibo.it/en/homepage> **Level in EQF** EQF level 8

09/2019 – 10/2021 Forlì, Italy

Master's degree in Aerospace Engineering Alma Mater Studiorum - University of Bologna

Address Via Fontanelle 40, 47121, Forlì, Italy **Website** <https://corsi.unibo.it/2cycle/AerospaceEngineering> **Final grade** 110/110 cum laude

Level in EQF EQF level 7 **Thesis** Data analysis of Cassini bistatic radar experiments

Giancorrado Brighi

CONTACT



09/2016 – 10/2019 Forlì, Italy

Bachelor's degree in Aerospace Engineering Alma Mater Sturdiorum - University of Bologna

Address Via Fontanelle 40, 47121, Forlì, Italy | **Website** <https://corsi.unibo.it/laurea/IngegneriaAerospaziale>

Final grade 110/110 cum laude | **Level in EQF** EQF level 6 | **Thesis** Preliminary assessment of opportunities for radio occultations of the Io Plasma Torus by the JUNO and the EuropaClipper missions

2010 – 2016 Forlì, Italy

Secondary School Liceo Scientifico Fulcieri Paulucci di Calboli

Address Via Aldo Moro 13, 47121, Forlì, Italy | **Website** <https://www.liceocalboli.edu.it/> | **Final grade** 100/100 with honors

CONFERENCES AND SEMINARS

27/04/2025 – 02/05/2025 Vienna, Austria

European Geosciences Union (EGU) General Assembly 2025

Presented abstract:

Brighi, G., Poggiali, V., Mastrogiuseppe, M., Zannoni, M., Hayes, A. G., Tortora, P., "Cassini Bistatic Radar Campaign during the Prime and Equinox Missions: Heterogeneous Reflections from Titan's Solid Surfaces", EGU General Assembly, Vienna, Austria, 2025.

Link <https://www.egu25.eu/>

09/12/2024 – 13/12/2024 Washington D.C., United States

American Geophysical Union (AGU) Fall Meeting 2024

Presented Abstract:

Brighi, G., Schroeder, D. M., Zannoni, M., Tortora, P., "Explaining Radar Fog in SHARAD's Observations of Mars South Polar Layered Deposits as a Realization of Dust-Rich Layers", AGU Fall Meeting, Washington, D.C., 2024.

Link <https://www.agu.org/annual-meeting-2024>

11/12/2023 – 15/12/2023 San Francisco (CA), United States

American Geophysical Union (AGU) Fall Meeting 2023

Presented abstract:

Brighi, G., Poggiali, V., Mastrogiuseppe, M., Hayes, A.G., Zannoni, M., Tortora, P., Lalich, D., MacKenzie, S., Lorenz, R.D., Oudrhiri, K., Lunine, J.I., "Titan's Northern Lake District as Observed by Cassini Bistatic Radar", AGU Fall Meeting, San Francisco, California, 2023.

Link <https://www.agu.org/fall-meeting-2023>

23/04/2023 – 28/04/2023 Vienna, Austria

European Geosciences Union (EGU) General Assembly 2023

Presented abstract:

Brighi, G., Poggiali, V., Tortora, P., Zannoni, M., Hayes, A., Lalich, D., Bonnefoy, L., MacKenzie, S., Nicholson, P. D., Oudrhiri, K., Lorenz, R. D., Soderblom, J. M., "Cassini Bistatic Radar Observations of Titan's Seas: Results about Dielectric Properties and Capillary Waves Detection", EGU General Assembly, Vienna, 2023.

Link <https://egu23.eu/>

LANGUAGE SKILLS

MOTHER TONGUE(S): Italian

Other language(s):

English

Listening C1

Spoken production C1

Reading C2

Spoken interaction C1

Writing B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

PROGRAMMING LANGUAGES

Python (computer programming) | MATLAB

Forlì, 30/08/2025

