

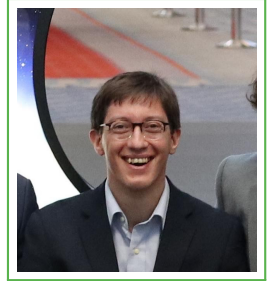
Francesco Romano

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Current Position

- Since 03/2018 **Research Associate**, *Institute of Space Systems (IRS), University of Stuttgart, Germany.*
Development of Atmosphere-Breathing Electric Propulsion within the EU-funded H2020 Project DISCOVERER
- Since 04/2015 **Ph.D. Candidate in Space Propulsion**, *Institute of Space Systems (IRS), University of Stuttgart, Germany.*

Education

- 2012-2014 **M.Sc. in Aerospace Engineering**, *University of Padua, Italy*, 138/120 ECTS.
- 10/2013-06/2014 **Master Thesis**, *Institute of Space Systems (IRS), University of Stuttgart, Germany.*
System analysis and Test-bed for an Air-Breathing Electric Propulsion System.
- 04-09/2012 **Erasmus Student**, *Dresden University of Technology, Dresden, Germany.*
- 2007-2011 **B.Sc. in Aerospace Engineering**, *University of Padua, Italy.*
- 2003-2013 **Diploma in Organ and Organ composition**, *Conservatory of Rovigo and Udine, Italy.*
- 2002-2007 **High School Diploma in Aeronautical Engineering**, *ITI A. Malignani, Udine, Italy.*

Achievements

- April 2020 **First ignition of the RF Helicon-wave based Inductive Plasma Thruster (IPT)**,
<https://www.irs.uni-stuttgart.de/en/institute/news/A-breakthrough-First-Ignition-of-the-Helicon-based-Radio-Frequency-Inductive-Plasma-Thruster-IPT/>.

Languages

- Italian Mother tongue
- English Advanced
- German Good
- Spanish Good

Computer skills

- Environment C, MATLAB
- Softwares SolidWorks/CATIA, XFtd
- Format L^AT_EX, MS Office

Engineering skills

- Design RF Plasma Source, Birdcage Antennas, Electric Propulsion Devices, Electromagnets, Vacuum Interfaces, Mechanical Structures
- Set-Up RF Plasma Systems, Vacuum Systems, Gas Feeding Systems, Measurement Systems
- Preparation Plasma/Vacuum Test-Procedures

Prizes & Awards

- Prize Prize "Freunde der Universität Stuttgart" for the best Master Thesis, July 2015
- Award A 3 year Ph.D. Scholarship from Landesgraduiertenförderung of the University of Stuttgart

Qualities

- Personal skills Fast in learning new languages, good software engineering skills, strong in problem-solving and communication skills, eager to learn and develop new skills.
- Experience Writing EU-proposal for scientific research.
- Experience Organist (in Italy and Germany) and Organ Teacher.

Publications, Projects and Experiences

- Journal Paper** F. Romano, B. Massuti-Ballester, T. Binder, G. Herdrich, S. Fasoulas, T. Schönherr, *System analysis and test-bed for an atmosphere-breathing electric propulsion system using an inductive plasma thruster*, Acta Astronautica 147:114-126, June 2018, DOI: 10.1016/j.actaastro.2018.03.031
- Project** **DISCOVERER**, EU H2020 Project started January 2017, www.discoverer.space
- Development of intake and RF-based inductive plasma thruster for an Atmosphere-Breathing Electric Propulsion System;
 - Monthly internal TelCo and Presentations, General Assembly Meetings, Reporting.
- Lecture** *Atmosphere-Breathing Electric Propulsion System*, Course of Unconventional Space Propulsion, Master's Degree, University of Stuttgart, from 2015
- Journal Paper** T. Schönherr, K. Komurasaki, F. Romano, B. Massuti-Ballester, G. Herdrich, *Analysis of Atmosphere-Breathing Electric Propulsion*, IEEE Transactions on Plasma Science, vol.43, no.1, 01/2015.

Miscellaneous

- International Conference Paper Presentations at International Conferences:
- 70th IAC in Washington D.C., USA, 10/2019;
 - 36th IEPC in Vienna, Austria, 09/2019;
 - 7th RGCEP in Rauischholzhausen, Germany, 10/2018;
 - 69th IAC in Bremen, Germany, 10/2018;
 - Space Propulsion 2018, Seville, Italy, 05/2018;
 - 35th IEPC in Atlanta, USA, 10/2018;
 - 68th IAC in Adelaide, Australia, 09/2017;
 - Space Propulsion 2016, Rome, Italy, 05/2016;
 - 34th IEPC in Kobe, Japan, 07/2015;
 - 5th RGCEP in Dresden, Germany, 09/2014;
- Sports & Fun Running, Swimming, Organ and Piano player, Classic Cars, Chess, Nature, Photography, Traveling.