

Principal Skills and Experience

Topics	Deep Space Communication System, Radio Science Experiment, Spacecraft Orbit Determination, Astrodynamics, Spacecraft Attitude Determination, Spacecraft Dynamics and Control.
Programming	Fortran 95/2003, Python, Bash, MATLAB/Simulink

Employment History

Company	Sapienza Università di Roma, Italy <i>From November 2013 to date</i> <i>Ph.D. student at Radio Science Laboratory, Sapienza University of Rome. Activities:</i> <ul style="list-style-type: none">• Improvements of Deep Space Communication System for BepiColombo, Juice and ExoMars (Delta-DOR, Range and Range-rate measurements)• Numerical simulation of BepiColombo's Radio Science Experiment• Numerical simulation of BepiColombo's Rotational Experiment• Development of Multiarc least-squares filter for orbit determination with process noise• Orbit determination and gravity field determination <i>From February 2014 to May 2014</i> <i>AOCS/GNC engineer at Sapienza Aerospace Research Centre. Activities:</i> <ul style="list-style-type: none">• Test and numerical simulation of BepiColombo's MPO attitude determination by gyros and star tracker measurements <i>From April 2013 to June 2013</i> <i>AOCS/GNC engineer at Sapienza Aerospace Research Centre. Activities:</i> <ul style="list-style-type: none">• Development of an attitude simulator for BepiColombo's MPO.• Development of star trackers and gyroscopes noise model• Precision Attitude Determination with Extended Kalman Filter Aero Sekur Spa, Aprilia, Italy <i>From January 2008 to July 2008</i> <i>Traineeship at the Space Research and Development Department. Activities:</i> <ul style="list-style-type: none">• Supersonic Computational Fluid Dynamics Analysis of ExoMars Probe and Disk Gap Band Parachute
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Education

University	Sapienza Università di Roma, Italy
2012	Master degree in Space Engineering at "Sapienza" University of Rome. Thesis "Development of attitude simulation for BepiColombo's MPO spacecraft".

Roma, 17 / 07 / 2015

Firma

