Allegato B

DANIELE DURANTE
Curriculum Vitae

Part I – General Information

Full Name	Daniele Durante
Gender	–
Date of Birth	–
Place of Birth	–
Citizenship	–
Permanent Address	–
Mobile Phone Number	–
E-mail	–
Spoken Languages	–

Part II – Education

Type	Year	Institution	Final grade
Ph.D. in Space and Aeronautical Engineering	2014–2017	University of Rome "La Sapienza"	Excellent
Master in Space and Astronautical Engineering	2012–2014	University of Rome "La Sapienza"	110/110 cum laude
Bachelor in Aerospace Engineering	2009–2012	University of Rome "La Sapienza"	110/110 cum laude

Part III – Appointments

Start	End	Institution	Position
2021	now	University of Rome "La Sapienza"	Research Fellow (RTD-a)
2017	2021	University of Rome "La Sapienza"	Post-doc researcher
Mar. 2018	Apr. 2018	University of California, Santa Cruz	Visiting researcher

Part IV – Teaching experience

Year	Institution	Lecture/Course	CFU
2021–now	University of Rome "La Sapienza"	Sistemi spaziali	3
2021–now	University of Rome "La Sapienza"	Space Guidance and Navigation Systems	3
2020	University of Rome "La Sapienza"	The gravity field of a planetary body: how is it described?	3

Part V – Society memberships, Awards and Honors

Year	Title
2018	Outstanding Student Poster and PICO (OSPP) Award, from European Geophysical Union (EGU)

Part VI – Funding Information

Year	Title	Role	Funding company
2022–2023	Utilization of a future optical ground station for plane-of-sky measurements to augment DDOR	Project manager	DLR
2020–2023	ARES4SC - Autonomous oRbit dEtermination System for a Smallsat Constellation	Scientific responsible	ASI
2022–2024	Radio scienza: attività scientifiche per la fase E della missione BepiColombo e per la missione estesa Juno	WP leader	ASI
2021–2023	ATLAS - Fundamental techniques, models and algorithms for a lunar radio navigation system	WP leader	ESA

Part VII – Other accomplishments

Year	Title
2020	Abilitazione Scientifica Nazionale (ASN) per la seconda fascia del settore concorsuale 09/A1 – Ingegneria aeronautica, aerospaziale e navale

Part VIII – Research Activities

Keywords	Brief Description
Orbit determination	Performing orbit determination of deep space probes via state-of-the-art radio instrumentation
Planetary geodesy	Determination of gravity fields of planetary bodies on ESA and NASA missions
Mission analysis	Analysis of semi-autonomous constellations on the Moon and Mars

Part IX – Summary of Scientific Achievements

Type	Value	Database
Number of publications	38	Scopus
Total Citations	1157	Scopus
Average Citations per Product	30.4	Scopus
Hirsch (H) index	15	Scopus
Normalized H index*	1.67	Scopus
Total Impact factor	376.96	Clarivate, Web of Science

*H index divided by the academic seniority.

Part X – Scientific publications

The list of 12 publications selected for the evaluation are:
[1], [5], [8], [10], [13], [17], [19], [21], [25], [26], [28], [32]

IXA – Publications on Journals (peer reviewed)

[1] Durante, D., T. Guillot, and L. Iess (2017). The effect of Jupiter oscillations on Juno gravity measurements, *Icarus* **282**, 174–182, https://doi.org/10.1016/j.icarus.2016.09.040. Journal IF: 2.98, n. citations: 15

[2] Galanti, E., D. Durante, S. Finocchiaro, L. Iess, and Y. Kaspi (2017). Estimating Jupiter's Gravity Field Using Juno Measurements, Trajectory Estimation Analysis, and a Flow Model Optimization, *The Astronomical Journal* **152:2**. https://doi.org/10.3847/1538-3881/aa72db. Journal IF: 4.15, n. citations: 10

[3] Bolton, S. J., A. Adriani, V. Adumitroaie, M. Allison, J. Anderson, S. Atreya, *et al.* (2017). Jupiter's interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft, *Science* **356**, 821-825. https://doi.org/10.1126/science.aal2108. Journal IF: 41,06, n. citations: 200

[4] Folkner, W.M., L. Iess, J.D. Anderson, S.W. Asmar, D.R. Buccino, D. Durante, *et al.* (2017). Jupiter gravity field estimated from the first two Juno orbits, *Geophysical Research Letters* **44**. https://doi.org/10.1002/2017GL073140. Journal IF: 4.34, n. citations: 67

[5] Iess, L., W.M. Folkner, D. Durante, M. Parisi, Y. Kaspi, E. Galanti, *et al.* (2018). Measurement of Jupiter's asymmetric gravity field, *Nature* **555**, 220-222. https://doi.org/10.1038/nature25776. Journal IF: 43.07, n. citations: 132

[6] Kaspi, Y., E. Galanti, W.B. Hubbard, D.J. Stevenson, L. Iess, T. Guillot, *et al.* (2018). The extension of Jupiter's jet to a depth of thousands of kilometers, *Nature* **555**, 223-226. https://doi.org/10.1038/nature25793. Journal IF: 43.07, n. citations: 162

[7] Guillot, T., Y. Miguel, B. Militzer, W.B. Hubbard, E. Galanti, Y. Kaspi, *et al.* (2018). A suppression of differential rotation in Jupiter's deep interior, *Nature* **555**, 227–230. https://doi.org/10.1038/nature25775. Journal IF: 43.07, n. citations: 121

[8] Iess, L., B. Militzer, Y. Kaspi, P. Nicholson, D. Durante, P. Racioppa, *et al.* (2019). Measurement and implications of Saturn's gravity field and ring mass, *Science* **364**, aat2965. https://doi.org/10.1126/science.aat2965. Journal IF: 41.85, n. citations: 113

[9] Galanti, E., Y. Kaspi, Y. Miguel, T. Guillot, D. Durante, P. Racioppa, and L. Iess (2019). Saturn's deep atmosphere revealed by the Cassini Grand Finale gravity measurements, *Geophysical Research Letters* **46**, https://doi.org/10.1029/2018GL078087. Journal IF: 4.50, n. citations: 51

[10] Durante, D., D.J. Hemingway, P. Racioppa, L. Iess, and D.J. Stevenson (2019). Titan's gravity field and interior structure after Cassini, *Icarus* **326**, 123–132. https://doi.org/10.1016/j.icarus.2019.03.003. Journal IF: 3.52, n. citations: 46

[11] Galanti, E., Y. Kaspi, F. Simons, D. Durante, M. Parisi, and S.J. Bolton (2019). Determining the depth of Jupiter's Great Red Spot: a Slepian approach, *The Astrophysical Journal Letters* **874**, L24. https://doi.org/10.3847/2041-8213/ab1086. Journal IF: 8.20, n. citations: 13

[12] Notaro, V., D. Durante, and L. Iess (2019). On the determination of Jupiter's satellite-dependent tides with Juno gravity data, *Planetary and Space Science* **175**, 34–40. https://doi.org/10.1016/j.pss.2019.06.001. Journal IF: 1.78, n. citations: 10

[13] Durante, D. (2019). Effect of Juno's solar panel bending on gravity measurements, *Journal of Guidance, Control, and Dynamics* **42:12**, 2694–2699. https://doi.org/10.2514/1.G004503. Journal IF: 2.69, n. citations: 4

[14] Di Benedetto, M., L. Imperi, D. Durante, M. Dougherty, L. Iess, V. Notaro, and P. Racioppa (2019). Augmenting NASA Europa Clipper by a small probe: Europa Tomography Probe (ETP) mission

concept, *Acta Astronautica* **165**, 211–218. https://doi.org/10.1016/j.actaastro.2019.07.027. Journal IF: 2.83, n. citations: 8

[15] Serra, D., G. Lari, G. Tommei, D. Durante, L. Gomez Casajus, V. Notaro, *et al.* (2019). A Solution of Jupiter's Gravitational Field from Juno Data with the ORBIT14 Software, *Monthly Notices of the Royal Astronomical Society* **490**, 766–772. https://doi.org/10.1093/mnras/stz2657. Journal IF: 1.28, n. citations: 11

[16] Notaro, V., M. Di Benedetto, G. Colasurdo, D. Durante, P. Gaudenzi, L. Imperi, *et al.* (2020). A small spacecraft to probe the interior of the Jovian moon Europa: Europa Tomography Probe (ETP) system design, *Acta Astronautica* **166**, 137–146. https://doi.org/10.1016/j.actaastro.2019.10.017. Journal IF: 2.41, n. citations: 0

[17] Durante, D., M. Parisi, D. Serra, M. Zannoni, V. Notaro, P. Racioppa, *et al.* (2020). Jupiter's gravity field halfway through the Juno mission. *Geophysical Research Letters* **47**, 4. https://doi.org/10.1029/2019GL086572. Journal IF: 4.72, n. citations: 53

[18] Cappuccio, P., A. Hickey, D. Durante, M. Di Benedetto, L. Iess, C. Plainaki, *et al.* (2020). Ganymede's gravity field, exosphere, rotations and tides from JUICE's 3GM experiment simulation, *Planetary and Space Science* **187**. https://doi.org/10.1016/j.pss.2020.104902. Journal IF: 2.03, n. citations: 22

[19] Di Ruscio, A., A. Fienga, D. Durante, L. Iess, J. Laskar, and M. Gastineau (2020). Analysis of Cassini radio tracking data for the construction of INPOP19a: A new estimate of the Kuiper belt mass, *Astronomy and Astrophysics* **640**. https://doi.org/10.1051/0004-6361/202037920. Journal IF: 5.80, n. citations: 17

[20] Fienga, A., A. Di Ruscio, L. Bernus, P. Deram, D. Durante, J. Laskar, and L. Iess (2020). New constraints on the location of P9 obtained with the INPOP19a planetary ephemeris, *Astronomy and Astrophysics* **640**. https://doi.org/10.1051/0004-6361/202037919. Journal IF: 5.80, n. citations: 16

[21] Cappuccio, P., V. Notaro, A. Di Ruscio, L. Iess, A. Genova, D. Durante, *et al.* (2020). Report on first inflight data of BepiColombo's Mercury Orbiter Radio-science Experiment, *IEEE Transactions on Aerospace and Electronic Systems* **56** https://doi.org/10.1109/TAES.2020.3008577. Journal IF: 4.10, n. citations: 24

[22] Markham, S., D. Durante, L. Iess, and D.J. Stevenson (2020). Possible evidence of p-modes in Cassini measurements of Saturn's gravity field. *The Planetary Science Journal* **1**, 27. https://doi.org/10.3847/PSJ/ab9f21. Journal IF: N/A, n. citations: 6

[23] Notaro, V., D. Durante, L. Iess, and S. Bolton (2021). Determination of Jupiter's mass from Juno radio tracking data, *Journal of Guidance, Control, and Dynamics* **44**, 5. https://doi.org/10.2514/1.G005311. Journal IF: 2.49, n. citations: 3

[24] Moirano, A., L. Gomez Casajus, M. Zannoni, D. Durante, and P. Tortora (2021). Morphology of the Io Plasma Torus from Juno Radio Occultations, *Journal of Geophysical Research: Space Physics* **126**, e2021JA029190. https://doi.org/10.1029/2021JA029190. Journal IF: 3.11, n. citations: 3

[25] Parisi, M., Y. Kaspi, E. Galanti, D. Durante, S.J. Bolton, S.M. Levin, *et al.* (2021). The depth of Jupiter's Great Red Spot constrained by the Juno gravity overflights, *Science* **374**, 964–968. https://doi.org/10.1126/science.abf1396. Journal IF: 63.83, n. citations: 8

[26] Cascioli, G., F. De Marchi, P. Racioppa, D. Durante, L. Iess, S. Hensley, *et al.* (2021). The determination of the rotational state and interior structure of Venus with VERITAS, *The Planetary Science Journal* **2**, 220. https://doi.org/10.3847/PSJ/ac26c0. Journal IF: N/A, n. citations: 10

[27] Miguel, Y., M. Bazot, T. Guillot, S. Howard, E. Galanti, Y. Kaspi, *et al.* (2022). Jupiter's inhomogeneous envelope, *Astronomy and Astrophysics* **662**, A18. https://doi.org/10.1051/0004-6361/202243207. Journal IF: 6.24^{+}, n. citations: 17

[28] Durante, D., T. Guillot, L. Iess, D.J. Stevenson, C.R. Mankovich, S. Markham, *et al.* (2022). Juno spacecraft gravity measurements provide evidence for normal modes of Jupiter, *Nature Communications* **13**, 4632. https://doi.org/10.1038/s41467-022-32299-9. Journal IF: 17.69†, n. citations: 2

[29] Cappuccio, P., M. di Benedetto, D. Durante, and L. Iess (2022). Callisto and Europa gravity measurements from JUICE 3GM experiment simulation, *The Planetary Science Journal* **3**, 199. https://doi.org/10.3847/PSJ/ac83c4. Journal IF: N/A, n. citations: 0

[30] Gomez Casajus, L., A.I. Ermakov, M. Zannoni, J.T. Keane, D. Stevenson*, et al.* (2022). The gravity field of Ganymede after the Juno's extended mission, *Geophysical Research Letters* **49**, e2022GL099475. https://doi.org/10.1029/2022GL099475. Journal IF: 5.58†, n. citations: 4

[31] Cascioli, G., D. Durante, E. Mazarico, M. Wallace, S. Hensley, and S. Smrekar (2023). Improving the VERITAS orbit reconstruction using radar tie points, *Journal of Spacecraft and Rockets* **60**, 366-373. https://doi.org/10.2514/1.A35499. Journal IF: 1.81†, n. citations: 2

[32] Molli, S., D. Durante, G. Boscagli, G. Cascioli, P. Racioppa, *et al.* (2023). Design and Performance of a Martian Autonomous Navigation System based on a Smallsat Constellation. *Acta Astronautica* **203**, 112-124. https://doi.org/10.1016/j.actaastro.2022.11.041. Journal IF: 2.95†, n. citations: 3

[33] Cascioli, G., J. P. Renaud, E. Mazarico, D. Durante, L. Iess, S. Goossens, and S. Smrekar (2023). Constraining the Venus interior structure with future VERITAS measurements of the gravitational atmospheric loading. *The Planetary Science Journal* **4**, 65. https://doi.org/10.3847/PSJ/acc73c. Journal IF: N/A, n. citations: 0

†Impact factor of the most recent year available (2021)

IXB – Conference proceedings

[34] Notaro, V., M. Di Benedetto, G. Colasurdo, D. Durante, P. Gaudenzi, L. Imperi, *et al.* (2016). Europa Tomography probe (ETP) mission feasibility – Spacecraft design, *67th International Astronautical Congress, IAC2016*, Guadalajara (Messico). Journal IF: N/A, n. citations: 2

[35] Di Benedetto, M., L. Imperi, D. Durante, M. Dougherty, L. Iess, V. Notaro, and P. Racioppa (2016). Augmenting NASA Europa Clipper by a small probe: Europa tomography probe (ETP) mission concept, *67th International Astronautical Congress, IAC2016*, Guadalajara (Messico). Journal IF: N/A, n. citations: 0

[36] Molli, S., D. Durante, G. Cascioli, S. Proietti, P. Racioppa, S. Simonetti, E.M. Alessi, and L. Iess (2021). Performance analysis of a Martian polar navigation system, 72nd *International Astronautical Congress, IAC2021*, Dubai (United Arab Emirates). Journal IF: N/A, n. citations: 1

[37] Marchese, V., K.V. Mani, L. Vigna, A. Novero, F. Ingiosi, F. Miglioretti, *et al.* (2021). Systems Design of a Deep-Space Microsatellite Platform for Mars Communication and Navigation Constellation, 72nd *International Astronautical Congress, IAC2021*, Dubai (United Arab Emirates). Journal IF: N/A, n. citations: 0

[38] Molli, S., G. Boscagli, M. di Benedetto, D. Durante, L. Vigna, and L. Iess (2022). Time transfer and orbit determination for a Martian navigation system based on smallsats, *9th International Workshop on Tracking, Telemetry and Command Systems for Space Applications (TTC)*, Noordwijk (Netherlands). https://doi.org/10.1109/TTC55771.2022.9975787. Journal IF: N/A, n. citations: 1

Part XI – Participation at scientific conferences

XIA – Conference abstracts (oral)

- Durante, D., and L. Iess (2015). The detection of Jupiter normal modes with gravity measurements of the mission Juno, *EPSC 2015*, Nantes (France)
- Iess, L., D. R. Buccino, D. Durante, W. M. Folkner, M. Parisi, P. Tortora, *et al.* (2017), The gravity field of Jupiter after the first three orbits of Juno, *EGU2017*, Vienna (Austria)
- Guillot, T., M. Yamila, W. Hubbard, Y. Kaspi, D. Reese, R. Helled, *et al.* (2017). Juno's first peek at Jupiter's interior, *EGU2017*, Vienna (Austria)
- Galanti, E., D. Durante, L. Iess, and Y. Kaspi (2017). A new approach for estimating the Jupiter and Saturn gravity fields using Juno and Cassini measurements, trajectory estimation analysis, and a dynamical wind model optimization, *EGU2017*, Vienna (Austria)
- Racioppa, P., D. Durante, and L. Iess (2017). The mass of Saturn B-ring from Cassini's Grand Finale orbits, *EGU2017*, Vienna (Austria)
- Serra, D., W.M. Folkner, L. Iess, J. D. Anderson, S.W. Asmar, D.R. Buccino, *et al.* (2017). Jupiter gravity field from the Juno mission first year of data, *EPSC2017*, Riga (Latvia)
- Guillot, T., Y. Miguel, W.B. Hubbard, Y. Kaspi, B. Militzer, S. Wahl, *et al.* (2017). Unveiling the Interior of Jupiter with Juno, *DPS2017*, Provo (Utah)
- Movshovitz, N., J.J. Fortney, R. Helled, W.B. Hubbard, D. Thorngren, C. Mankovich, *et al.* (2017). Constraining the interior density profile of a Jovian planet from precision gravity field data, *DPS2017*, Provo (Utah)
- Y. Kaspi, E. Galanti, W.B. Hubbard, D.J. Stevenson, L. Iess, T. Guillot, *et al.* (2017). Inferring the depth of the atmospheric flows on Jupiter from the Juno gravity measurements, *DPS2017*, Provo (Utah)
- Durante, D., W.M. Folkner, L. Iess, E. Galanti, L. Gomez Casajus, Y. Kaspi, *et al.* (2017). Jupiter's gravity field from Ka-band Doppler tracking of Juno, *AGU2017*, New Orleans (Louisiana)
- Folkner, W.M., L. Iess, J.D. Anderson, D.R. Buccino, D. Durante, M. Feldman, *et al.* (2017). The Jupiter gravity field from the first year of Juno science operations, *AGU2017*, New Orleans (Louisiana) – (invited)
- Militzer, B., S.M. Wahl, W.B. Hubbard, T. Guillot, Y. Miguel, Y. Kaspi, *et al.* (2017). Models of Jupiter's Interior that match Juno's Gravity Measurements, *AGU2017*, New Orleans (Louisiana) – (invited)
- Kaspi, Y., E. Galanti, W.B. Hubbard, D.J. Stevenson, L. Iess, T. Guillot, *et al.* (2017). The depth and structure of the atmospheric flows on Jupiter: results from the Juno gravity measurements, *AGU2017*, New Orleans (Louisiana)
- Iess, L., P. Racioppa, D. Durante, M. Mariani, A. Anabtawi, J.W. Armstrong, *et al.* (2017). The Dark Side of Saturn's Gravity, *AGU2017*, New Orleans (Louisiana) – (invited)
- Movshovitz, N., J.J. Fortney, R. Helled, W.B. Hubbard, C. Mankovich, D. Thorngren, *et al.* (2017). Constraining Saturn's interior density profile from precision gravity field measurement obtained during Grand Finale, *AGU2017*, New Orleans (Louisiana)
- Galanti, E., Y. Kaspi, D. Durante, L. Iess, and W. B. Hubbard (2017). Initial estimation of Saturn's deep flow structure using the Cassini Grand Finale gravity measurements, *AGU2017*, New Orleans (Louisiana)
- Galanti, E., Y. Kaspi, W.B. Hubbard, D.J. Stevenson, S.J. Bolton, L. Iess, *et al.* (2018). The depth of Jupiter's zonal jet-streams as inferred from the Juno gravity measurements, *EGU2018*, Vienna (Austria)
- Galanti, E., Y. Kaspi, D. Durante, and L. Iess (2018). Saturn's deep flow structure revealed by the Cassini Grand Finale gravity measurements, *EGU2018*, Vienna (Austria)

- Iess, L., D. Durante, M. J. Mariani, P. Racioppa, J. Fortney, Y. Kaspi, *et al.* (2018). Gravity measurements in the Grand Finale Orbits and their implications, *AOGS*, Honolulu (Hawaii)
- Durante, D., L. Iess, B. Militzer, Y. Kaspi, P. Nicholson, P. Racioppa, *et al.* (2018). The surprising gravity field of Saturn, *COSPAR2018*, Pasadena (CA)
- Durante, D., V. Notaro, P. Racioppa, E. Galanti, Y. Kaspi, and L. Iess (2018). Can Juno detect the gravitational signature of Jupiter's meridional flows and frequency-dependent tidal response?, *COSPAR2018*, Pasadena (CA)
- Durante, D., V. Notaro, P. Racioppa, E. Galanti, Y. Kaspi, and L. Iess (2018). Juno's sensitivity to the gravitational signature of Jupiter's meridional flows, *EPSC2018*, Berlin (Germany)
- Durante, D., P. Racioppa, and L. Iess (2018). A clue about Saturn's normal modes from the analysis of Cassini's Grand Finale gravity orbits, *EPSC2018*, Berlin (Germany)
- Galanti, E., Y. Kaspi, D. Durante, P. Racioppa, and L. Iess (2018). The deep winds of Jupiter and Saturn as inferred from recent gravity measurements - similarities and differences, *EPSC2018*, Berlin (Germany)
- Galanti, E., Y. Kaspi, Y. Miguel, T. Guillot, D. Durante, P. Racioppa, and L. Iess (2018). Saturn's deep atmosphere revealed by the Cassini Grand Finale gravity measurements, *EPSC2018*, Berlin (Germany)
- Racioppa, P., D. Durante, L. Iess, B. Militzer, Y. Kaspi, P. Nicholson, *et al.* (2018). Saturn's gravity field determination from Doppler tracking of the Cassini spacecraft, *The ninth Moscow Solar System Symposium 2018*, Moscow (Russia)
- Durante, D., L. Iess, P. Racioppa, D. Hemingway, and D. J. Stevenson (2018). Cassini's observation of Titan's gravity field and interior structure, *AGU Fall Meeting 2018*, Washington D.C.
- Parisi, M., D. Durante, W. M. Folkner, L. Iess, J. D. Anderson, D. Buccino, *et al.* (2018). The gravity field of Jupiter after two years of Juno mission, *AGU Fall Meeting 2018*, Washington D.C.
- Racioppa, P., Durante D., L. Iess, B. Militzer, Y. Kaspi, P. Nicholson, *et al.* (2018). Saturn's gravity field determination from Cassini Grand Finale and implications on its internal structure, AGU Fall Meeting 2018, Washington D.C.
- Kaspi, Y., E. Galanti, L. Iess, and D. Durante (2018). The possible mechanisms controlling the deep jets on Jupiter and Saturn in light of the Juno and Cassini gravity measurements, *AGU Fall Meeting 2018*, Washington D.C.
- Durante, D., V. Notaro, P. Racioppa, and L. Iess (2019). A peek inside the gas giants with gravity measurements, XV *Congresso Nazionale di Scienze Planetarie*, Florence (Italy)
- Notaro, V., D. Durante, and L. Iess (2019). Can Juno improve on the determination of Jupiter's mass?, *AIDAA XXV International Congress*, Rome (Italy)
- Durante, D., D. Hemingway, P. Racioppa, L. Iess, and D.J. Stevenson (2019). What we know about Titan's gravity field after Cassini, *EPSC-DPS Joint meeting 2019*, Geneva (Switzerland)
- Galanti., E., Y. Kaspi, M. Parisi, W.M. Folkner, D. Durante, F.J. Simons, and S.J. Bolton (2019). How deep is Jupiter's Great Red Spot? A multimethod analysis using the recent Juno gravity measurements, *EPSC-DPS Joint meeting 2019*, Geneva (Switzerland)
- Notaro, V., D. Durante, and L. Iess (2019). Update on Jupiter's mass from Juno gravity and navigation data, *EPSC-DPS Joint meeting 2019*, Geneva (Switzerland)
- Durante, D., L. Iess, P. Racioppa, D. Hemingway, and D. J. Stevenson (2019). Titan's interior and gravity field as determined by Cassini, *Titan after Cassini-Huygens Scientific workshop*, ESAC, Madrid (Spain)
- Durante, D., L. Iess, D.R. Buccino, W.M. Folkner, M. Parisi, D. Stevenson, *et al.* (2019). What we still don't know about Jupiter's gravity field after Juno, *AGU Fall Meeting 2019*, San Francisco (CA)
- Durante, D., M. Parisi, D. Serra, M. Zannoni, V. Notaro, P. Racioppa, *et al.* (2020). Jupiter's gravity field updates from Juno, *EGU 2020*, Virtual Meeting

- Durante, D., and L. Iess (2021). Jupiter's gravity field determination with Juno: the challenges of accurate modelling of spacecraft dynamics, *COSPAR 2020*, Virtual Meeting – (invited)
- Durante, D., and L. Iess (2021). A peek into Jupiter's normal modes from Juno gravity data, *EGU 2021: Gather Online*, Virtual Meeting
- Durante, D., L. Iess, T. Guillot, D.J. Stevenson, C.R. Mankovich, S. Markham, S. Bolton (2021). Observation of Jupiter's normal modes from Juno gravity measurements, *AGU Fall Meeting 2021*, New Orleans (LA) – (invited)
- Parisi, M., Y. Kaspi, E. Galanti, D. Durante, S.J. Bolton, S.M. Levin, *et al.* (2021). How deep is Jupiter's Great Red Spot? Results from the Juno gravity experiment, *AGU Fall Meeting 2021*, New Orleans (LA)
- Lunine, J.I., *et al.* (2021). Juno's Insights on the Origin and Evolution of Jupiter, *AGU Fall Meeting 2021*, New Orleans (LA) – (invited)
- Molli., S., A. Sesta, D. Durante, L. Iess, S. Simonetti, and E.M. Alessi (2022). Martian user positioning via a semi-autonomous smallsat constellation, *COSPAR 2022*, Athens, Greece
- Iess, L., M. di Benedetto, P. Cappuccio, G. Cascioli, F. de Marchi, D. Durante, *et al.* (2022). ATLAS - Fundamental techniques, models and algorithms for a lunar radio navigation system: a proposal for a lunar navigation system infrastructure, *COSPAR 2022*, Athens, Greece
- Cappuccio, P., I. di Stefano, L. Iess, S. Asmar, J. De Vincente, D. Durante, *et al.* (2022). Accurate calibration of range and Doppler data of BepiColombo's first superior solar conjunction, *COSPAR 2022*, Athens, Greece
- Kaspi, Y., *et al.* (2022). Revisiting the Jupiter wind-induced gravity field: high harmonics and surface gravity, *EPSC 2022*, Granada, Spain
- Ermakov, A., R. Akiba, L. Gomez Casajus, M. Zannoni, P. Tortora, R. Park, *et al.* (2022). Ganymede's interior after Juno and before JUICE, *AGU Fall Meeting 2022*, Chicago (IL)
- Kaspi, Y., *et al.* (2022). Atmospheric flows imprint the high-degree gravity field of Jupiter, *AGU Fall Meeting 2022*, Chicago (IL)
- Di Stefano, I., *et al.* (2022). Calibration and performance of BepiColombo radio science data during a solar conjunction experiment, *AGU Fall Meeting 2022*, Chicago (IL)
- Cappuccio, P., M. Di Benedetto, D. Durante, and L. Iess (2022). Callisto Gravity Field and Interior Structure Constraints from JUICE 3GM Gravity Experiment, *AGU Fall Meeting 2022*, Chicago (IL)
- Durante, D., *et al.* (2023). Jupiter and Saturn normal modes observed through Juno and Cassini gravity measurements, *EGU General Assembly 2023*, Vienna (Austria)
- Ermakov, A., *et al.* (2023). Ganymede's internal structure after Juno and before JUICE, *EGU General Assembly 2023*, Vienna (Austria)
- Iess, L., *et al.* (2023). VERITAS gravity investigations: measuring Venus' rotational state, moment of inertia, Love numbers, and atmospheric tides, *EGU General Assembly 2023*, Vienna (Austria)
- Sesta, A., *et al.* (2023). Orbit Determination and Time Transfer for a Lunar Radio Navigation System, *EGU General Assembly 2023*, Vienna (Austria)
- Sośnica, K., *et al.* (2023). Precise orbits for the lunar navigation system: challenges in the modeling of perturbing forces and broadcast orbit representation, *EGU General Assembly 2023*, Vienna (Austria)
- Mazarico, E., *et al.* (2023). Exploring the Venus crust and lithosphere with the VERITAS gravity science investigation, *LPSC 2023*, The Woodlands (TX)

XIA – Conference abstracts (poster)

- Durante, D., L. Iess, D. J. Stevenson, J. Lunine, P. Tortora, J. W. Armstrong, and S. Asmar (2016). Titan's gravity: An update, *AGU Fall Meeting 2016*, San Francisco (CA)

- Durante, D., L. Iess, P. Tortora, and M. Zannoni (2017). Juno observations of the Io Plasma Torus, *EGU2017*, Vienna (Austria)
- Zannoni, M., D. Durante, L. Iess, and P. Tortora (2017). Characterizing the Io Plasma Torus with Juno radio science experiment, *AGU Fall Meeting 2017*, New Orleans (Louisiana)
- Durante, D., W.M. Folkner, L. Iess, E. Galanti, Y. Kaspi, A. Milani, *et al.* (2018). Determination of Jupiter's gravity field by Juno, *EGU2018*, Vienna (Austria)
- Hickey, A., D. Durante, P. Racioppa, and L. Iess (2018). Using orbit determination to infer Saturn's atmospheric density profile during the final moments of Cassini's plunge, *EGU2018*, Vienna (Austria)
- Hickey, A., D. Durante, L. Iess, C. Plainaki, A. Mura, and A. Milillo (2018). The effect of Ganymede's exosphere on JUICE's determination of the moon's gravity field, *EPSC2018*, Berlin (Germany)
- Notaro, V., D. Durante, and L. Iess (2018). A possible determination of Jupiter's frequency-dependent tides at the end of the Juno mission, *EPSC2018*, Berlin (Germany)
- Serra, D., G. Lari, G. Tommei, A. Milani, D. Durante, L. Gomez Casajus, *et al.* (2018). The ORBIT14 Solution of Jupiter's Gravity Field from Juno Data, *AGU Fall Meeting 2018*, Washington D.C.
- M. T. Zuber, D. E. Smith, E. Mazarico, A. Genova, G. A. Neumann, L. Iess, *et al.* (2018). Measuring the Dynamics and Scale of the Solar System, *AGU Fall Meeting 2018*, Washington D.C.
- Durante, D., V. Notaro, P. Racioppa, and L. Iess (2019). The interior of Gas Giants as inferred from gravity measurements, *EGU 2019*, Vienna, Austria
- Serra, D., G. Lari, G. Tommei, D. Durante, L. Gomez Casajus, V. Notaro, *et al.* (2019). Jupiter's gravity field estimated from Juno data using the ORBIT14 software, *EPSC-DPS Joint meeting 2019*, Geneva (Switzerland)
- Hickey, A., D. Durante, L. Iess, and C. Plainaki (2019). Determination of Ganymede's exosphere and gravity field by JUICE, *EPSC-DPS Joint meeting 2019*, Geneva (Switzerland)
- Notaro, V., D. Durante, L. Iess, W.M. Folkner, M. Parisi, D.R. Buccino, *et al.* (2019). Jupiter's tides with Juno: a mid-mission update, *AGU Fall Meeting 2019*, San Francisco (CA)
- Parisi, M., E. Galanti, W.M. Folkner, Y. Kaspi, W.B. Hubbard, D. Buccino, *et al.* (2019). The gravity signature of Jupiter's small-scale atmospheric features from the Juno mission, *AGU Fall Meeting 2019*, San Francisco (CA)
- Durante, D., V. Notaro, P. Racioppa, L. Iess, M. Parisi, D.R. Buccino, *et al.* (2020). Updates on Jupiter's gravity from the latest Juno data, *AGU Fall Meeting 2020*, Virtual Meeting
- Cascioli, G., S. Hensley, F. De Marchi, D. Breuer, D. Durante, P. Racioppa, *et al.* (2021). Combining VERITAS Doppler Tracking and Radar Tie Points to Determine the Rotational State and Interior Structure of Venus, *AGU Fall Meeting 2021*, New Orleans (LA)
- Durante, D., T. Guillot, L. Iess, D.J. Stevenson, C.R. Mankovich, S. Markham, *et al.* (2022). Determining Jupiter's normal modes through juno's gravity field measurements, *COSPAR 2022*, Athens, Greece
- Kaspi, Y., E. Galanti, R. Park, D. Durante, L. Iess, M. Parisi, and D. Buccino (2022). Revisiting the Jupiter wind-induced gravity field: surface gravity and high-degree harmonics, *COSPAR 2022*, Athens, Greece
- Vigna, L., P Tricarico, F. Lepore, G. Reverberi, L. Iess, D. Durante, S. Molli, and P. Racioppa (2022). Autonomous orbit determination system for a smallsat constellation, *36th Annual Small Satellite Conference*, Logon (Utah)
- Durante, D., F. De Marchi, G. Cascioli, L. Iess, and E. Mazarico (2022). Error budget for the VERITAS gravity science investigation, AGU Fall Meeting 2022, Chicago (IL)
- Iess, L., G. Cascioli, E. Mazarico, D. Durante, F. de Marchi, S. Hensley, and S. Smrekar (2023). Venus deep interior structure from VERITAS measurements of rotation and tides, *International EnVision Venus science workshop*, Berlin (Germany)

- Mazarico, E., L. Iess, G. Cascioli, D. Durante, F. de Marchi, S. Hensley, and S. Smrekar (2023). The Venus gravity field from VERITAS, *International EnVision Venus science workshop*, Berlin (Germany)

Part XII – Organization of sessions at conferences

- EGU 2019, Vienna (Austria) – Session: "*Juno at Jupiter: including collaborative Earth-based observations and comparison with other giant planets"*
- EPSC-DPS Joint meeting 2019, Geneva (Switzerland) – Session: "*Jupiter midway through the Juno mission"*
- EPSC 2020, Granada (Spain) – Session: *"Radio and Optical Science Instrumentation and Techniques for Solar System Studies"*
- ECU 2021: 1st Electronic Conference on Universe – Session: *"Deep-Space probes"*
- URSI General Assembly and Scientific Symposium 2021, Rome (Italy) – Session: *"Spacecraft tele-communications signals"*
- AGU Fall Meeting 2021, New Orleans (LA) – Session: "The Future of Planetary Atmospheric, Surface, and Interior Science Using Radio and Laser Links"
- AGU Fall Meeting 2022, Chicago (IL) – Session: "The Future of Planetary Atmospheric, Surface, and Interior Science Using Radio and Laser Links"
- AGU Fall Meeting 2023, San Francisco (CA) – Session: "Giant planet interiors"
- AGU Fall Meeting 2023, San Francisco (CA) – Session: "Planetary Atmospheric, Surface, and Interior Science Using Spacecraft Radio Links"

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