

Luana Liberato

Curriculum Vitae

Personal Information

Name **Luana Liberato Mendes.**

Education

- 2019 - **Ph.D. in Physics**, *Universidade Estadual Paulista, UNESP/GDOP, current Guaratingueta-Brazil*, Advisor: Othon Cabo Winter. Grantee of CAPES, Brazil..
- 2021 - 2022 **1-Year Stay**, *Université de la Côte d'Azur, Observatoire de la Côte d'Azur, Laboratoire Lagrange, Nice - France*, Advisor: Paolo Tanga. Grantee of CAPES/PrInt, Brazil..
- 2017 - 2019 **Master's in Physics**, *Universidade Estadual Paulista, UNESP/GDOP, Guaratingueta-Brazil*, Advisor: Othon Cabo Winter. Grantee of CAPES, Brazil..
- 2013 - 2017 **Science Initiation Scholarship**, *Universidade Estadual Paulista, UNESP/GDOP, Guaratingueta-Brazil*, Advisor: Othon Cabo Winter. Grantee CNPq, Brazil..
- 2012 - 2017 **Bachelor's in Physics**, *Universidade Estadual Paulista, UNESP/GDOP, Guaratingueta-Brazil*.

Publications

- 2022 Liberato, L., Araujo, R. and Winter, O. C. "**The Fate of Near Earth Asteroids: dynamical evolution and lifetimes**", under review.
- 2022 Tanga, P. et. al. "**Gaia DR3: the Solar System survey**", *Astronomy & Astrophysics*, In press, Accepted 01 June 2022
- 2020 Liberato, L. & Winter, O. C. "**The structure of the co-orbital stable regions as a function of the mass ratio**" - 2020, *Monthly Notices of the Royal Astronomical Society*, v. 496, p. 3700-3707.

Main Works Presented in Conferences

- 2022 **XI Taller de Ciencias Planetarias**, *Online Conference*, Sobre o destino dos NEOS: Evolução e tempos de vida, Oral.
O. Winter, **L. Liberato**, R. Araujo
- 2022 **XI Taller de Ciencias Planetarias**, *Online Conference*, Os períodos e formas 3D dos satélites irregulares de Jupiter, Poster.
A. R. Gomes-Júnior, R. Sfair, B. Morgado, **L. Liberato**, T. Francisco, V. Lattari, R. Bouffeur, Grupo do Rio, Observadores.
- 2021 **XX Colóquio Brasileiro de Dinâmica Orbital**, *Online Conference*, The paths and fates of NEOS: dynamical evolution and lifetimes, Oral.
L. Liberato, R. Araujo, O. Winter
- 2021 **Europlanet Science Congress 2021**, *Online Conference*, Dynamical characterisation of small asteroid family members by an occultation astrometry survey, Oral.
L. Liberato, P. Tanga, R. Leiva, F. Spoto
- 2021 **Europlanet Science Congress 2021**, *Online Conference*, Automatic prediction, selection and analysis of occultations to characterize asteroid family members, Oral.
R. Leiva, P. Tanga, and **L. Liberato**
- 2020 **Europlanet Science Congress 2020**, *Online Conference*, The structure of the co-orbital stable regions as a function of the mass ratio, Oral.
L. Liberato, O. Winter
- 2020 **Exoplanets III**, *Heidelberg-Germany*, *Online Conference*, The structure of the co-orbital stable regions as a function of the mass ratio, Poster.
L. Liberato, O. Winter
- 2020 **X Taller de Ciencias Planetarias**, *Punta del Este - Uruguay*, The structure of co-orbital stable regions according to the mass ratio, Poster.
L. Liberato, O. Winter
- 2018 **XIX Colóquio Brasileiro de Dinâmica Orbital**, *São José dos Campos - Brazil*, Estudo da dependência das regiões de estabilidade co-orbitais com a massa e o semi-eixo maior do corpo secundário, Poster.
L. Liberato, O. Winter
- 2018 **IX Taller de Ciencias Planetarias**, *La Plata - Argentina*, Study of the habitable zone stability in planetary systems with one G-type star, Poster.
L. Liberato, O. Winter
- 2016 **XVIII Colóquio Brasileiro de Dinâmica Orbital**, *Águas de Lindóia- Brazil*, Formação Planetária em Sistema Estelar Triplo - Adaptação do Pacote Mercury, Poster.
L. Liberato, R. Domingos, O. Winter

Miscellaneous

- 2021-current **Member of Gaia Data Processing and Analysis Consortium (DPAC)**.
Analysis and validation of asteroids' astrometric data from DR3

- 2022 **Asteroid Collaborative Research via Occultation Systematic Survey**,
<https://lagrange.oca.eu/fr/home-across>.
 Member of the core team as observer and performing orbit computations.
- 2020 **Member of Congress Evaluation Committee**.
 Evaluator of works on astronomy for XXXII Congress of Scientific Initiation of UNESP.
- 2019–2021 **Member of the Physics Postgraduation Council**.
 Elected student representant at PGC.
- 2019 **Temporary Teacher**.
Linear Algebra and Analytic Geometry for Engineering classes at Sao Paulo State University.
- 2019 **Member of Examination Board**.
 Course Conclusion of *Mayara Moura de Castro Bento* for Bachelor's in Physics at Sao Paulo State University.
- 2017–2022 **Asteroid Day Organization Member**.
 Member of the organizer team in the scientific communication event for the general public entitled Asteroid Day, promoted by Orbital Dynamics and Planetology Group (GDOP) in Guaratingueta-Brazil
- 2017–current **Observational experience**, updated in July 2021.
 Observatório do Pico dos Dias - Boller & Chivens (0.6m), 36 nights
 Observatório do Pico dos Dias - Zeiss (0.6m), 14 nights
 Observatório do Pico dos Dias - Perkin-Elmer (1.6m), 10 nights
 Observatório do GDOP - Meade (0.4m), 20 nights
 Observatório do GDOP - Skywatcher (0.35m), 5 nights
 Observatoire de la Côte d'Azur/site Plateau de Calern - UniversCity (0.5m), 16 nights

Computer skills

- Basic FORTRAN, IRAF, C/C++
- Intermediate JUPYTER NOTEBOOK, PYTHON, GNU PLOT
- Advanced BASH, L^AT_EX

Languages

- Portuguese** Native
- English** Proficient
- Italian** Intermediate
- French** Basic
- Spanish** Basic