

Yeva Gevorgyan de
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Yeva Gevorgyan

Education

2016 - 2020, University of São Paulo

PhD in Applied Mathematics

Title: "*From the internal structure to the librations of satellites and back*"

2018-2019, IMCCE, l'Observatoire de Paris

One year PhD internship

Project: " *A rheological model for the deformation and orbital dynamics of celestial bodies*"

2014 - 2016, University of São Paulo

MSc in Physics

Title: "*Quantisation of the Bosonic String*"

2009 - 2013, Yerevan State University

BS in Physics

Title: "*Factorization of the ellipsoidal Landau problem*"

Languages

Armenian

Native language

Russian

Native language

English

Fluent (speaking, reading, writing)

Portuguese

Fluent (speaking, reading, writing)

Experience in Organization of International Events

2013, International Workshop, Yerevan, Armenia

Part of OC "Quantum Aspects of Black Holes and its Recent Progress "

2012, International Workshop, Yerevan, Armenia

Part of OC "Supersymmetry in Integrable Systems – SIS'12"

Teaching Experience

02/2020 to 06/2020, Teaching Assistant

Instructor for MAP3121: Numerical methods and applications

02/2018 to 06/2018, Teaching Assistant

Instructor for MAP3121: Numerical methods and applications

08/2017 to 11/2017, Teaching Assistant

Instructor for MAP0216: Introduction to real analysis

03/2017 to 06/2017, Teaching Assistant

Instructor for MAP0217: Differential calculus

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Technical Skills

TEX

Mathematica

Fortran

Awards

2015, IUPAP Travel Grants Program Award, IUPAP

Working Group on Women in Physics.

2013, Red Diploma, Yerevan State University

3rd in Class of 2009 (GPA 97.5%). Equivalent to "Magna Cum Laude".

2012, Alikhanyan Brothers Award, Yerevan State University

Awarded to the top students in their final year of Bachelor's degree.

2009, 48th MIPT Physical-Mathematical Olympiad – 3rd place

Yearly olympiad for high school students.

2007, Armenian National Mathematics Olympiad – Bronze Medal

Yearly olympiad for high school students.

Publications

Librations of a body composed of a deformable mantle and a fluid core

Celestial Mechanics and Dynamical Astronomy, v. 134(2), p. 1-83, 2022.

Homogeneous model for the TRAPPIST-1e planet with an icy layer

A&A, v. 650, p. A141, 2021.

Andrade rheology in time-domain. Application to Enceladus' dissipation of energy due to forced libration

ICARUS, v. 343, p. 113610, 2020.

Approximate probabilistic cellular automata for the dynamics of single-species populations under discrete logisticlike growth with and without weak Allee effects

PHYSICAL REVIEW E, v. 95, p. 052131, 2017.

Landau problem on the ellipsoid, hyperboloid and paraboloid of revolution

Modern Physics Letters A, v. 29, p. 1450148, 2014.

Defects, non-abelian t-duality, and the Fourier-Mukai transform of the Ramond-Ramond fields

Journal of High Energy Physics, v. 2014, p. 035, 2014.

Participation to events

2021, Multi-scale (time and mass) dynamics of space objects, Iasi, Romania

2021, XX COLÓQUIO BRASILEIRO DE DINÂMICA ORBITAL, SP, Brazil

2020, I-CELMECH Training school, Milan, Italy

2019, 32º Colóquio Brasileiro de Matemática, Rio de Janeiro, RJ, Brazil

2019, Mathematical Models and Methods in Earth and Space Sciences, Rome, Italy

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2018, *2nd GeoPlaNet Thematic School - Fluid-Rock Interactions in the Solar System*, Nantes, France

2018, *Doctoral Training: Internal Earth*, Les Houches, France

2018, *PLATO Theory Workshop*, Cambridge, UK

2017, *CELMEC VII*, Viterbo , Italy

2017, *SDSM*, Viterbo , Italy

2015, *30º Coloquio Brasileiro de Matematica*, Rio de Janeiro, RJ, Brazil

2015, *Conference on Recent Progress in Quantum Field Theory and String Theory*, Yerevan, Armenia

2015, *Third Joint Dutch-Brazil School on Theoretical Physics*, São Paulo, SP, Brazil

2015, *XVIII Escola de Verão Jorge Andre Swieca de Particulas e Campos*, Campos do Jordão

2013, *OSA IONS-Armenia*, Yerevan, Armenia

2013, *Third International Summer School Symmetry in Integrable Systems and Nuclear Physics*, Tsakadzor, Armenia

2012, *Winter School on Quantitative Systems Biology*, Trieste, Italy

Interests

Celestial mechanics, dynamical astronomy, dynamical systems