

## List with the titles, authors, and affiliations of the abstracts submitted to CBDO 202 pre-registration

### CBDO 001

The Orbital Eccentricities of Directly Imaged Companions Using Observable-based Priors: Implications for Population-level Distributions

Clarissa R. Do Ó, Kelly K. O'Neil, Quinn M. Konopacky, Tuan Do, Gregory D. Martinez, Jean-Baptiste Ruffio, and Andrea M. Ghez

University of California, San Diego & University of California, Los Angeles

### CBDO 002

The co-orbital dynamics in binary systems

Fernando Roig (1), Cristian Giuppone (2)

1. Observatório Nacional, Brazil,

2. Universidad Nacional de Córdoba, Argentina

### CBDO 003

ALR\_Sim\_tracks - trajectory simulator software to assist the search for favourable trajectories for the exploration of the triple Asteroid 2001-SN263 from the Laser Altimeter point of view

Antonio G. V. de Brum

Federal University of ABC, SBC, São Paulo, Brazil

### CBDO 004

Capture trajectories for NEAs using three-body dynamics

Dr. Priscilla Sousa-Silva, Dr. Denilson Paulo Souza dos Santos, Dr. Luiz Alberto de Paula, Júlia Gomes da Costa and Henrique Babo Terra

UNESP - São Paulo State University, Brazil

### CBDO 005

Dimensioning and design (2D and 3D) of the laser altimeter for the ASTER Mission

Ana Liriel Claudio Santos, Antonio Gil Vicente de Brum

Universidade Federal do ABC

### CBDO 006

Deep learning classification of asteroids in s-type secular resonances

V. Carruba (1), S. Aljbaae (2, 3), R. C. Domingos 4, G. Caritá (2), A. Alves (1), E. M. D. S. Delfino (1)

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### CBDO 007

Understanding and describing a phase transition from limited to unlimited diffusion for a billiard system

Anne Kétri Pasquinelli da Fonseca, Prof. Dr. Edson Denis Leonel

CBDO 008

The five largest satellites of Uranus: Astrometric observations spread over 29 years at the Pico dos Dias Observatory

Camargo, J.I.B. (1), Veiga, C.H. (1), Vieira-Martins (1), R., Fienga (2), A., Assafin, M. (3)

1. Observatório Nacional/MCTI,
2. Observatoire de la Côte d'Azur,
3. Observatório do Valongo/UFRJ

CBDO 009

Assessment of Relative Motion in Autonomous Spaceflight

Rodolfo Batista Negri

Federal University of São Paulo

CBDO 010

The geomagnetic field and charge generation for satellites

Eric D'Antona, Helton Gaspar

Universidade Federal de Santa Catarina, UFSC

CBDO 011

Rendezvous formalism applied into final stage correction maneuverings of LEO-DRO Cislunar Transfer

Ricardo José Schwarz, Helton da Silva Gaspar

Universidade Federal de Santa Catarina, UFSC, campus Joinville

CBDO 012

Numerical validation of electric charging from current induced by the geomagnetic field

Helton da Silva Gaspar, Eric Henrique D'Antona de Sousa

Universidade Federal de Santa Catarina, UFSC, Campus Joinville

CBDO 013

Low-energy trajectories generated in the Earth-Moon system destined to the Jovian system

Victor Ayres Peres (1), Antônio Fernando Bertachini de Almeida Prado (2), Antônio Gil Vicente de Brum (1)

1. Universidade Federal do ABC.
2. Instituto Nacional de Pesquisas Espaciais

CBDO 014

A Magnetotorque Model with External Coils for CubeSat Attitude Control

Yan da Silva Moura, Helton da Silva Gaspar

Universidade Federal de Santa Catarina, UFSC

CBDO 015

Characterization of the Rings of the Centaur Chariklo

A. L. R. Mitidiero (1), A. R. Gomes-Júnior (1, 2), B. E. Morgado (2, 3)

1. Universidade Federal de Uberlândia, Instituto de Física

2. Laboratório Interinstitucional de e-Astronomia (LIneA) e INCT do e-Universo
3. Universidade Federal do Rio de Janeiro, Observatório do Valongo

CBDO 016

Orbital Precision of Himalia through Numerical Integrations and Statistical Analysis of Observations

Evelyn C. M. Prais (1), Altair R. Gomes-Júnior (1,2)

1. Federal University of Uberlândia - Institute of Physics
2. Interinstitutional Laboratory of e-Astronomy

CBDO 017

Light Deflection in Stellar Occultations: A Challenge for Astrometry

Maísa Poiani (1), Altair Ramos Gomes Junior (1), Julio Ignacio Bueno de Camargo (2)

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2. Observatório Nacional/MCTI

CBDO 018

Qualitative analysis of the dynamic evolution of planetary systems

Eduardo Verrone Sanches, Tatiana A. Michtchenko

Universidade de São Paulo, Universidade de São Paulo

CBDO 019

The effect of impactor mass-ratio in the accretion of Uranus and Neptune

Leandro Esteves, André Izidoro, Othon Winter

UNESP Guaratinguetá,  
Rice University

CBDO 020

Resonance zone analysis on the disturbing effect of solar radiation pressure and J2 in low orbit to mitigate space debris using a solar sail

Calisto José da Silva Neto, Jean Paulo dos Santos Carvalho

Universidade Federal do Recôncavo da Bahia

CBDO 021

Machine Learning Applied to Asteroid Study in the LSST Era

M. M. P. de Sá, A. R. Gomes-Júnior

Federal University of Uberlandia, International e-Astronomy Laboratory (LIneA)

CBDO 022

Searching for long lasting natural orbits around moons in the Solar System

Lucas S. Ferreira (1), Antônio F. B. A. Prado (2), Rafael Sfair (1), Thamis C. F. Carvalho Ferreira (1)

1. Universidade Estadual Paulista Júlio de Mesquita Filho, UNESP, Guaratinguetá (SP), Brasil.
2. Instituto Nacional de Pesquisas Espaciais, INPE, São José dos Campos (SP), Brasil

CBDO 023

An analytical model for the dynamical evolution of two-planet extrasolar systems in wide binaries stars  
Correa-Otto, J.

CBDO 024

Orbital Stability of Small Satellites in Trans-Netunian Dwarf Planet Systems

Lucas dos Santos Cadavez, Adrian Rodriguez Colucci

Observatório do Valongo (UFRJ)

CBDO 025

Analytical Modeling of the Gravitational Potential of Irregularly Shaped Celestial Bodies considering three distinct internal structures: Application to (21) Lutetia

Marcelo Lisboa Mota (1), Safwan Aljbaae (2), Antonio F. B. A. Prado (2)

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CBDO 026

Analytical Modeling of the Gravitational Potential of Irregularly Shaped Celestial Bodies: Application to (285263) 1998 QE2

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3. University of Central Florida, Florida Space Institute, Orlando, FL, USA

CBDO 027

Investigation of orbits around the asteroid (16) Psyche

Alessandra F. S. Ferreira

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CBDO 028

Energy Variation of Space Debris considering Orbital Maneuvers and Ground-Based Laser

Jorge K. FORMIGA (1), Denilson P. SANTOS (2), Antonio Bertachini de Almeida Prado (3), Rodolpho Vilhena de Moraes (3)

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2. São Paulo State University (UNESP)- São João da Boa Vista,

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CBDO 029

Stellar Occultations observed by the CHEOPS Space Telescope

A. R. Gomes-Júnior (1), B. Morgado (2), B. Sicardy (3), P. Santos-Sanz (4), F. Braga-Ribas (5), Grupo do Rio, Lucky Star Team (6)

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CBDO 030

Estimation of Orbital Errors of Space Telescopes

MONTEIRO, L. D. R., A. R. Gomes-Júnior.

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CBDO 031

Confined chaos and the chaotic angular motion of Atlas, a Saturn's inner satellite

Lucas S. Pereira, Daniela C. Mourão, Othon C. Winter

FEG UNESP

CBDO 032

OGLE-2019-BLG-1470L AB c Exoplanet Orbital Dynamics Analysis

C.E Borges (1), A. R. Gomes-Júnior (1), R. Sfair (2)

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CBDO 033

Tridimensional Dynamics of Small Satellites

Bruno Foltran Junior, Nelson Callegari Junior

UNESP

CBDO 034

Comparison of aerodynamic control algorithms for satellites in LEO to increase its orbital decay

Prof. Dr. Antônio Fernando Bertachini de Almeida Prado (1), Dr. Jhonathan Murcia-Piñeros (2), Matheus Henrique de Abreu Miranda (1)

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2. UNIFESP

CBDO 035

Non-transiting exoplanet characterization using TTV pattern and Deep Learning

Marco Antonio Petersem-Domingues, Fernando Roig

Observatório Nacional

CBDO 036

Analysis and two-dimensional modelling of diffraction effects in stellar occultations

Lucas Naves Rodrigues, Altair Ramos Gomes Junior

Universidade Federal de Uberlândia, Laboratório Interinstitucional de e-Astronomia

CBDO 037

Prediction of Gravitational Microlensing

Fabício Santos Kalaki (1), Altair Ramos Gomes Júnior (1), Leandro de Almeida (2)

1. Universidade Federal de Uberlândia,

## 2. Laboratório Nacional de Astrofísica

### CBDO 038

Stellar Occultations by the Trojan (2363) Cebriones

I. B. Batista, B. E. Morgado, F. Braga-Ribas, A. R. Gomes-Júnior, M. Assafin, B. Sicardy, R. Vieira-Martins, SORA Developers and Observers.

Observatório do Valongo-UFRJ

### CBDO 039

Triton as a primordial regular satellite of Neptune

Rodney Gomes

Observatório Nacional

### CBDO 040

Impact of Insertion Errors on the Performance of Small Satellite Constellations

Antonio Fernando Bertachini de Almeida Prado (1), Leonardo Barbosa Torres dos Santos (1), Lucas Marcone Bernardino Da Silva (2), Lucas José da Silva Pacheco (2)

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### CBDO 041

Aster Project: A New Launch Window with Multiple Swing-bys and Technological Parameters

Felipe C. Peixoto, Antônio Delson C. de Jesus

Universidade Estadual de Feira de Santana (UEFS) - Departamento de Física

### CBDO 042

On the Dynamics around Quaoar: its shape and the unstable limit

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### CBDO 043

Analysis of interplanetary missions involving gravity-assisted maneuvers with the moon and the use of photonic solar sails

Cristiano F. de Melo (1), Rebeca S. Ribeiro (2), Antonio F. B. A. Padro (2)

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### CBDO 044

Isochronous Bifurcations

Iberê L. Caldas (1), M. Mugnaine (2), M.J. Lazarotto (1), B. B. Leal (?), R. L. Viana (?), A. M. Ozorio de Almeida (3)

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3. Brazilian Center for Research in Physics

CBDO 045

Orbital Dynamics in LEO and GEO regions: perturbative effects for reentry

Jean Paulo dos S. Carvalho (1), Eva Tresaco (2)

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2. Escuela Politécnica Superior and IUMA-Universidad de Zaragoza

CBDO 046

Heliotropic Orbits at Asteroid Dimorphos: J2, Solar Radiation Pressure, and Third-Body Perturbations

Guilherme de Oliveira Paes (1), Rodolpho Vilhena de Moraes (2), Jean Paulo dos Santos Carvalho (3)

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CBDO 047

The Tesseral Resonance 3:1 in the Jacobi Ellipsoid

Dairo Antonio Cuellar Mateus

Universidade Federal do Triângulo Mineiro

CBDO 048

Double lunar swing-by from periodic orbits in the Restricted Four-Body Problem

Rebeca S. Ribeiro (1), Cristiano F. de Melo (2), Antônio F. B. A. Prado (1)(3)

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3. Peoples' Friendship University of Russia (RUDN), Moscow, Russian Federation

CBDO 049

Analysing the dynamics of Kepler-90 planetary system

Silvia Giuliani Winter (1), Daniel Gaslac (2), Othon Winter (1), Nelson Calegari Jr (3), Marco Muñoz Gutiérrez (4)

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CBDO 050

Design of a Frozen Orbit for GARATÉA-L mission

Luiz Arthur Gagg Filho, Sandro da Silva Fernandes

Instituto Tecnológico de Aeronáutica (ITA)

CBDO 051

Semi-Analytical Theory for a Lunar Probe Orbit

Sandro da Silva Fernandes, Luiz Arthur Gagg Filho

Instituto Tecnológico de Aeronáutica (ITA)

#### CBDO 052

Analysis of the asteroid Phereclos from stellar occultations

Matheus V. Marques (1), A. R. Gomes-Júnior (1), F. Braga-Ribas (3), R. Vieira-Martins (4)

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4. Observatório Nacional/MCTI; Universidade Federal do Rio de Janeiro, Observatório do Valongo

#### CBDO 053

Analysis of fuel consumption for orbital correction maneuvers to mitigate injection errors after launch

Evandro Marconi Rocco, Liana Dias Gonçalves, José Batista da Silva Neto, Ronan Arraes Jardim Chagas, Antonio Carlos de Oliveira Pereira Junior

Instituto Nacional de Pesquisas Espaciais (INPE)

#### CBDO 054

Evaluation of the effects of disturbances capable of altering the orbit of the BiomeSat satellite

Liana Dias Gonçalves, Evandro Marconi Rocco, José Batista da Silva Neto, Ronan Arraes Jardim Chagas, Antonio Carlos de Oliveira Pereira Junior

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#### CBDO 055

Search for Symmetrical Periodic Orbits using the GridSearch Method

Maria Júlia Fassis, Maria Helena Moreira Morais

IGCE, UNESP.

#### CBDO 056

Use of a Rational Agent to determine the attitude of a Solar Sail

Lucas G. Meireles (1), Othon C. Winter (1), Antônio F. B. de A. Prado (2)

1. Universidade Estadual Paulista (UNESP) - Guaratinguetá, SP, Brasil.
2. Instituto Nacional de Pesquisas Espaciais (INPE) - São José dos Campos, SP, Brasil.

#### CBDO 057

Orbital analysis of the Kiruna Meteor (2023/2/27)

Daniela Cardozo Mourão (1), Bárbara Celi Braga Camargo (1), Gabriel Borderes Motta (2), Tima Sergienko (2), Urban Brändström (2)

1. UNESP – São Paulo State University,
2. IRF - Swedish Institute of Space Physics

#### CBDO 058

The Moon as a possible source of Earth's co-orbital bodies

Gomes, Luiz; Sfair, Rafael; Winter, Othon; Moraes, Ricardo; Borderes Motta, Gabriel

Universidade Estadual Paulista (Unesp) - Brasil,

Swedish Institute of Space Physics (IRF) - Suécia

#### CBDO 059

Rita de Cássia Domingos



CBDO 060

Optimizing Hyperparameters in a Convolutional Neural Network Model for Image Analysis

Isadora R. C. Silva, Joao P. I. Gosmin, Rita C. Domingos, Ivan A. A. Garde

FESJ - UNESP

CBDO 061

Numerical analysis of planar colliding binary companions

Caritá, G.; Aljbaae, S.; Silva, D. L.; Mottola, S.; Hussmann, H.; Willner, K.; Prado, A. F. B. A

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CBDO 062

Monitoring the movement of small celestial bodies at FESJ/UNESP Station.

Clara Sepe Lemos, Felipe Franco Canalle, Rita de Cassia Domingos

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CBDO 063

Genetic Algorithm Simulation of Mitigation Maneuver Spacecraft-Asteroid Bennu and Yarkovsky Effect

Daniel dos Anjos Costa (1), Antônio Delson C. de Jesus (2)

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2. Department of Physics, State University of Feira de Santana, Feira de Santana, Brazil.

CBDO 064

Dynamical evolution of a system composed by extended deformable bodies with complex rheologies

Vitor M. de Oliveira, Clodoaldo Ragazzo, Alexandre C. M. Correia

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CFisUC, Departamento de Física, Universidade de Coimbra, Portugal,

IMCCE, Observatoire de Paris, PSL Université, France

CBDO 065

Island myriads in periodic potentials

Matheus Lazarotto, Iberê Caldas, Yves Elskens

Universidade de São Paulo

Aix-Marseille Université

CBDO 066

Asteroid Dynamics Influenced by Secular  $g$  –  $s$  Resonances

Abreuçon A. Alves, Valerio Carruba, Eduardo M. S. Delfino, Marco A. F. S. Filho

Universidade Estadual Paulista, UNESP, Guaratinguetá (SP), Brasil

CBDO 067

Surface Properties of the Jovian Trojan (58931) Palmys

Peixoto, VF, Camargo, JIB, Morgado, BE, Felipe S. Ferreira, Boufleur, RC, Braga-Ribas, F, Assafin, M, Gomes, AR, Martins, RV, desenvolvedores SORA e Observadores.

CBDO 068

Dynamical structure of compact planetary systems

Gabriel Teixeira Guimarães, Eiichiro Kokubo

SOKENDAI/NAOJ, NAOJ

CBDO 069

Multi-fluid hydrodynamical simulations of circumbinary planet formation via pebble accretion

Ana Guimarães, Gavin A.L. Coleman, Richard P. Nelson, Othon Winter, Rafael Sfair

Queen Mary University of London,

São Paulo State University (UNESP)

CBDO 070

Machine learning approach for mapping stability regions around planetary systems

Tiago Francisco Leal Pinheiro, Rafael Sfair, Giovana Ramon

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CBDO 071

A semi-analytical approach to mean motion resonances

Luis Renato de Campos Damin, Maria Helena Moreira Morais

IGCE/UNESP

CBDO 072

Numerical Analysis of CubeSat Orbit Using Aerodynamic Perturbative Forces and Debris Monitoring in Low Earth Orbit

Ana Paula Alves do Prado, Denilson Paulo Souza dos Santos

Universidade Estadual Paulista UNESP - Faculdade de Engenharia de São João da Boa Vista - FESJ - São Paulo

CBDO 073

Modelling the interactions between objects on counter-revolving orbits

Helena Morais

IGCE/UNESP

CBDO 074

Innovative Approaches in Nanosatellite and Tether Systems for Cost-Effective Space Missions

Fabio Augusto da Silva Borges, Denilson Paulo Souza dos Santos

Universidade Estadual Paulista - UNESP, FESJ, São João da Boa Vista, SP

CBDO 075

Tidal Evolution and Spin-Orbit Dynamics: The Critical Role of Rheology.  
C. Ragazzo, L. Ruiz  
IME-USP, IMC-UNIFEI

#### CBDO 076

Dynamical evolution of a debiased size distribution of Near-Earth Objects  
Priscilla Pires (1), Rosana Araújo (2), Othon Winter (2), A. Amarante (2)  
1. Faculdade de Tecnologia, Universidade do Estado do Rio de Janeiro,  
2. Grupo de Dinâmica Orbital e Planetologia, Universidade Estadual Paulista "Júlio de Mesquita Filho"

#### CBDO 077

Orbital dynamics of the third body in the polar V808 Aurigae  
Isabel J. Lima, Rosana A.N. Araujo, Rafael R. Souza  
Universidade Estadual Paulista, Campus Guaratinguetá

#### CBDO 078

Space Debris: Analysis and Preventive Mitigation  
Denilson P. Souza dos Santos, Jorge K. Formiga  
Universidade Estadual Paulista - UNESP, FESJ, São João da Boa Vista, SP; Universidade Estadual Paulista - UNESP, ICT, São José dos Campos, SP

#### CBDO 079

Transfer of Near-Earth Objects (NEOs) to the Centaurs' region  
Rosana Araujo (1), Luana Liberato (2), Othon Winter (1)  
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2. Université Côte d'Azur, Nice, France

#### CBDO 080

Structure of Chariklo's rings using a stellar occultation observed by the JWST  
B. E. Morgado (1), P. Santos-Sanz (2), A. R. Gomes Júnior (3), J. Stansberry (5),  
B. J. Holler (4), H. B. Hammel (5), J. L. Ortiz (2), B. Sicardy (6), N. Morales (2),  
J. Desmars (7), N. Pinilla-Alonso (8), R. G. French (9), Z.-Y. Lin (10),  
E. Fernández-Valenzuela (8), M. Vara-Lubiano (2), M. Kretlow (2), D. Souami (11),  
F. Braga-Ribas (12), J. Camargo (13), G. Benedetti-Rossi (14), F. L. Rommel (13),  
R. Duffard (2), M. Assafin (1), R. Leiva (2)  
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13. Obs. Nacional/LineA, Brazil,

14 São Paulo State U., Brazil.

CBDO 081

Machine learning techniques for the design of Spinning Theter System

Ernesto Vieira Neto, Rogério R. Santos

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CBDO 082

Multivariate analysis as a Spatial Debris mitigation strategy

Dimitrie Hristov Sobrinho, Denilson Paulo Souza dos Santos

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CBDO 083

Analysis of the internal structure of minor bodies of the Solar System.

Raí Machado-Oliveira (1), O. C. Winter (1), R. Sfair (1), G. Valvano (1), A. Martin (1), G. Borderes-Motta (2), A. Amarante (1)

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CBDO 084

A phenomenological wobbling model for isolated pulsars and the braking index

Araujo, E. C. A. (1), De Lorenci, V. A. (2), Peter, P. (3), Ruiz, L. S. (2)

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CBDO 085

Orbital mechanics around non-homogeneous elongated asteroids

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CBDO 086

Exocomet dynamics in the Kepler-90 extrasolar system

Nilce da Silva dos Santos, Silvia Maria Giuliani Winter, Rafael Ribeiro de Sousa

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CBDO 087

Evaluation of centroiding algorithms for an autonomous star tracker

Marcio Afonso Arimura Fialho

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CBDO 088

#### Tidal evolution in dwarf planet systems

Karyna Gimenez, Adrián Rodríguez

Observatório do Valongo- Universidade Federal do Rio de Janeiro

#### CBDO 089

Stable configurations for the retrograde planet of the  $\nu$  Octantis system

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#### CBDO 090

A Study on Space Debris Generated by a Break-Up Event

Gabriel Homero Barros Vieira, Antônio Fernando Bertachini de Almeida Prado, Cláudia Celeste Celestino.

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#### CBDO 091

Planetary resonances: properties for arbitrary eccentricities and mutual inclinations.

Tabare Gallardo

Facultad de Ciencias, Udelar, Uruguay

#### CBDO 092

Accretion and Uneven Depletion of the Main Asteroid Belt

Rogério Deienno, David Nesvorný, Matthew Clement, William Bottke, Andre Izidoro, Kevin Walsh

Southwest Research Institute, Johns Hopkins APL, Rice University

#### CBDO 093

Stellar Occultation Technique for studying the Trojan (1172) Aneas

I. Gil, B. Morgado, A. R. Gomes-Júnior, F. Braga-Ribas, M. Assafin, R. Vieira-Martins, B. Sicardy, SORA

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Universidade Federal de Uberlândia,

LESIA Observatoire de Paris

#### CBDO 094

Formation of moons around super-Earths

Nilce da Silva dos Santos, Gustavo Madeira, Paulo Victor da Silva Soares, Leandro Esteves de Paula

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#### CBDO 095

Equilibrium figure for Quaoar using stellar occultation

G. Margoti (1,2), F. Braga-Ribas (1,2), B. E. Morgado (3,2) , B. Sicardy (4), J. L. Ortiz (5), J. Desmars (6,7), R. Vieira-Martins (8,2), A.R. Gomes-Júnior (9,2), M. Assafin (3,2), J. I. B. Camargo (8,2), C. L. Pereira (8,2), The Rio Group, The Lucky Star Team The Observers Team.

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9. Universidade Federal de Uberlândia.

CBDO 096

Secular dynamics of small bodies perturbed by an eccentric giant planet

Rodrigo Cabral-Fontes, Tabaré Gallardo

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CBDO 097

Analysis of Inner Planet Formation in Systems with Hot Jupiters

Bárbara Celi Braga Camargo , Adrian Rodriguez Colucci, Othon Cabo Winter

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São Paulo State University (UNESP)

CBDO 098

Development of an electronic system for a CanSat

Bruno Gabriel Santos Prestes

Unesp

CBDO 099

Earth-to-Earth transfer via powered lunar swing-by

Artur Robson Cutolo, Luiz Arthur Gagg Filho, Sandro da Silva Fernandes

ITA - Instituto Tecnológico de Aeronáutica.

CBDO 100

Dynamical characterization of the 6/1 mean motion resonance between Quaoar's ring and Weywot

Adrián Rodríguez, Bruno Morgado, Nelson Callegari Jr.

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Instituto de Geociências e Ciências Exatas - UNESP

CBDO 101

Study of the Transport Dynamics in the Three-Body Problem

Júlia Gomes da Costa, Priscilla Andressa Sousa Silva

Universidade Estadual Paulista "Júlio de Mesquita Filho"

#### CBDO 102

Studying plasma with electrostatic energy analyzer with different geometries and a RF choker filter  
João David, José Leonardo Ferreira, William Wenner, Júlio Cesar, Helbert de Oliveira Coelho Junior  
University of Brasília - Insitute of Physics

#### CBDO 103

Rendezvous Maneuvers Optimized by Genetic Algorithm for Space Debris Removal  
Paulo do Monte, Antônio Delson C. de Jesus  
Universidade Estadual de Feira de Santana

#### CBDO 104

Testing (911) Agamemnon 3D model with new Stellar Occultations and synthetic light curve generations.  
Eros O. Gradovski, Felipe Braga-Ribas, Giuliano Margoti, Altair R. Gomes-Júnior, Gustavo B. Rossi, Roberto V. Martins, Marcelo Assafin, Bruno Sicardy, Josselin Desmars, Jose Ortiz.  
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Observatoire de Paris, Observatório Nacional (ON),  
Observatório do Valongo (OV),  
Observatoire de Paris,  
Instituto de Astrofísica de Andalucía (IAA).

#### CBDO 105

Conception and build of a Langmuir's probe for analysis of a RF discharge generated plasma.  
William Wenner Teixeira Sinésio, **José Leonardo Ferreira**, Júlio César de Melo Almeida, Helbert de Oliveira Coelho Júnior.  
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Researcher, Teacher and Laboratory Coordinator of Laboratório de Física dos Plasmas - Instituto de Física - Universidade de Brasília

#### CBDO 106

Constraining physical and orbital parameters for possible extrasolar ring systems  
Tiago Pinheiro, Giovana Ramon, Rafael Sfair  
São Paulo State University. Eberhard Karls Universität Tübingen

#### CBDO 107

Cloud Space Debris: Behavior Analysis of Debris in Clouds and Prospection of Collection Missions  
Peterson dos Santos Maurício, Denilson Paulo Souza dos Santos, Jorge Kennety Formiga  
UNESP - Universidade Estadual de São Paulo - São João da Boa Vista - SP, UNESP  
Universidade Estadual de São Paulo - São João da Boa Vista - SP, UNESP  
Universidade Estadual de São Paulo - ICT - São José dos Campos - SP.

#### CBDO 108

A Hamiltonian for 1/1 Rotational Secondary Resonances, and Application to Small Satellites of Saturn and Jupiter

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#### CBDO 109

Stable Regions in the Kepler-80 System

João Pedro Siqueira Monteiro, Silvia Maria Giuliatti Winter

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#### CBDO 110

Stellar Occultations by the Trojan 1143 Odysseus

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#### CBDO 111

Centaur 29P/Schwassmann-Wachmann 1 and its near-nucleus environment from a stellar occultation

Chrystian L. Pereira (1,2), Felipe Braga-Ribas (3,2), Bruno Sicardy (4), Bruno. E. Morgado (5,2), José L. Ortiz (6), Marcelo Assafin (5,2), Richard Miles (7), Josselin Desmars (8,9), Julio I. B. Camargo (1,2), Gustavo Benedetti-Rossi (10,2), Mike Kretlow (6), Roberto Vieira-Martins (1,2)

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#### CBDO 112

Collision Avoidance Maneuvers Optimization Using Evolutionary Algorithms

Guilherme Marcos Neves, Francisco Das Chagas Carvalho, Denilson Paulo Souza dos Santos, Antônio Fernando Bertachini de Almeida Prado

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#### CBDO 113

Staging and trajectory optimization of VLM-1 satellite launch vehicle

Guilherme da Silveira, Sandro da Silva Fernandes

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CBDO 114

Twistless bifurcations on isochronous islands

M. Mugnaine, M.J. Lazarotto, B. B. Leal, R. L. Viana, A. M. Ozorio de Almeida, Iberê L. Caldas,  
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CBDO 115

Exploring the Lambert Problem: An Analysis of Orbital Maneuvers

Eduardo Oliveira Noveti, Denilson Paulo Souza dos Santos  
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CBDO 116

University Satellite Instrumentation - Cubesat V2

Carlos V. B. Domingues, Denilson P. S. Santos, Jorge K. Formiga  
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CBDO 117

Dynamic tides in the exoplanetary system CoRoT-3b.

Sylvio Ferraz Mello, Raphael Alves Silva  
IAG-USP

CBDO 118

Surface Characteristics of Asteroid (346724) 2011 UW158: A Large Super-Fast Rotator

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CBDO 119

Decomposition of Symmetrical Classes of Central Configurations

Marcelo Pedro dos Santos.  
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CBDO 120

On the Absence of Coorbital Satellites in the Galilean System

Ricardo Moraes, Daniela Mourão, Othon Winter, Gabriel Borderes-Motta  
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UNESP - Universidade Estadual Paulista,  
UNESP - Universidade Estadual Paulista, IRF - Swedish Institute of Space Physics

CBDO 121

Searching for orbits around Io considering the Laplacian resonance

Thamis C.F. Carvalho Ferreira , Antônio F.B.A. Prado, Silvia M. Giuliatti Winter, Lucas S Ferreira

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#### CBDO 122

Formation of the satellite Pan

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#### CBDO 123

Photometric Study of TNOs and Centaurs Observed by the Dark Energy Survey

Felipe S. Ferreira (1,3), Julio I. B. de Camargo (1,3), Viviane F. Peixoto (1,2,3), Martín B. Huarca (1,3), Rodrigo C. Bouffleur (1,3), Marcelo Assafin (2,3), Adriano Pieres (1,3), Roberto Vieira-Martins (1,3), Luiz Nicolaci da Costa (3), Altair Ramos Gomes-Júnior (5,3), Felipe Braga-Ribas (4,1,3), equipe de TI do Laboratório Interinstitucional de e-Astronomia (LIneA).

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#### CBDO 124

Dynamics of dust particles from IDP collisions in the Saturn system.

Vanessa Moura, Rafael Sfair, Patrícia Buzzatto

São Paulo State University, University of Tübingen

#### CBDO 125

On the attraction of ellipsoids and the properties of the Newtonian attraction

Alain Albouy

Observatoire de Paris, CNRS, France

#### CBDO 126

Faint Young Sun Paradox: dynamic evolution and habitability

Sofia Leite Fonseca, Adrián Rodríguez Colucci, Gustavo Frederico Porto de Melo

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#### CBDO 127

Mapping Slopes Across the Surface of Red Asteroid (269) Justitia

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CBDO 128

Machine learning techniques for autonomous satellite guidance during terminal rendezvous operations  
Santos, R. R., Sousa, R. R., Gomes, V. M., Neto, E. V.  
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Bifurcations of a Symmetric Family of Dziobek Configurations  
Michelle Gonzaga dos Santos, Eduardo S.G. Leandro.  
Universidade Federal de Pernambuco

CBDO 130

Mitigating Actuator Faults in Spacecraft Formation Flying through a Reconfigurable Guidance Strategy  
Willer Gomes dos Santos, Paul Mason, Eric T. Stoneking, Bruno V. Sarli  
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Study of the Main Challenges in the Use of the Ensemble Kalman Filter in the Attitude Estimation Problem of Spacecraft  
Roberta Veloso Garcia (1), Hélio Koiti Kuga (2), William Reis Silva (3), Leandro Baroni (4), Maria Cecília Zanardi (5), Paula C. P. M. Pardal (6)  
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3. Universidade de Brasília,  
4. Universidade Federal do ABC,  
5. Universidade Estadual de São Paulo,  
6. Center of Engineering and Product Development

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Simulation of measurements for low Earth orbit satellite GPS receivers  
Leandro Baroni, Helio Koiti Kuga, Roberta V. Garcia, William R Silva, Paula C. P. M. Pardal  
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Center of Engineering and Product Development (CEiiA), Evora, Portugal

CBDO 133

Existence and Stability of Moon's Stationary Polar Orbits  
Marcelo D. Marchesin, Cristiano F. de Melo  
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CBDO 134

Dynamics of a particle around a non-spherical symmetrical body with a deep depression

Paulo Victor da Silva Soares (1), Silvia Maria Giuliani Winter (1), Gustavo Madeira (2), Othon Winter (1), Taís Ribeiro (1).

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#### CBDO 135

Control of Spacecraft Formation Flying in The Low Earth Orbit Under Orbital Perturbations

Bruno Leonardo Schuster, Willer Gomes dos Santos

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#### CBDO 136

Studying secular resonances and the limits of stability in eccentric planetary systems

Alfredo Suescun, Tabaré Gallardo

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#### CBDO 137

Investigating Dynamical Structures in the TOI-178 System

Jovan Boskovic, Rafael Sfair, Christoph Schäfer

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#### CBDO 138

Space System Engineering Process to design orbit for an electromagnetic detection payload

Márcio Martins da Silva Costa (1), Rafael dos Santos Souza da Cruz (1), Olympio Lucchini Coutinho (1), Liana Dias Gonçalves (2), Willer Gomes dos Santos (1), Christopher Shneider Cerqueira (1)

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#### CBDO 139

Utilizing Cosmic Microwave Background Measurements for Improved Interstellar Navigation Systems

Pedro Kukulka de Albuquerque, Willer Gomes dos Santos

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#### CBDO 140

Existence and stability of equilibrium points above the poles on the Sun-Earth-Sail Problem

Fernando Luiz Assunção de Paula, Marcelo Domingos Marchesin

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#### CBDO 141

Design of a control System for a stratospheric probe tracking antenna

Chrystian Jones Maia Campos, Willer Gomes dos Santos

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CBDO 142

Trade-off Families of Transfer Trajectories in the Cislunar region

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CBDO 143

Perilune Poincare Maps: a NRHO's Station Keeping Approach

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CBDO 144

An analytical study on the solar radiation pressure and planetary oblateness perturbations over orbital dynamical systems.

Navarro, H.B., Celestino, C.C.

CECS - Fundação Universidade Federal do ABC

CBDO 145

Semi-analytical approach to study high inclination and high eccentricity resonances

Nicolas Pan, Tabaré Gallardo

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CBDO 146

Formation Flying Design Applied for an Aurora Borealis Monitoring Mission

Thais Cardoso Franco (1), Caio Nahuel Sousa Fagonde (2), Willer Gomes dos Santos (2)

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CBDO 147

Classifying 4-body cocircular central configurations

Igor de Barros Nonato

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CBDO 148

The Shearless Attractor

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CBDO 149

Physical Characteristics of Jupiter's Trojan Asteroids Combining Stellar Occultation Techniques with Dimensionless 3D Model

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#### CBDO 150

Lunar Artificial Satellite Constellation: Geometric Prowess Optimization

Ana Paula Marins Chiaradia, Gabriel Miranda, Othon Cabo Winter

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#### CBDO 151

Dynamics and Control of Spacecraft Formation Flying Applied to Space-based Solar Power Missions

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#### CBDO 152

Convergence of orbits to the stationary state for a family of two-dimensional nonlinear mappings

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#### CBDO 153

The effect of eccentricity on the insolation and habitability of exoplanets

Lariele Fernanda Spatti, Nelson Callegari Junior

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#### CBDO 154

Control of spacecraft formation flying through modern reinforcement learning

Gabriel Goes Aragão Santana, Willer Gomes dos Santos

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#### CBDO 156

Evolution and Stability of Low Orbits Around the Moon

Rayne Marcondes dos Santos, André Amarante Luiz

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#### CBDO 157

Development of AI for Navigation of Space Systems Considering Orbital Dynamics and Astronomy: A Case Study with SpaceX Crew Dragon Docking Simulation

Narayane Ribeiro Medeiros

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CBDO 158

Space Communication Protocols: A Comprehensive Review of Standards and Technologies for Satellite and Nano Satellite Missions

Júlia Fernandes de Lima Oliveira, Juan Marco de Jesus Libonatti

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CBDO 159

The Dynamics About Trojan Asteroid (11351) Leucus: A Very Slow Rotator

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CBDO 160

Evolution of a Space Debris Cloud

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CBDO 161

Development of AI for Analysis of Public NASA Images to Discover New Celestial Bodies

Narayane Ribeiro Medeiros

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CBDO 162

Resonant Dynamics of Close-in Small Saturnian Satellites: the cases of Pallene and Atlas

Demétrio Tadeu Ceccatto, Nelson Callegari Jr.

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CBDO 163

Collision Avoidance Maneuvers based on Differential Perturbation Mitigation Techniques

Fernanda Helena Lobato Santos, Willer Gomes dos Santos.

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CBDO 164

Orbital and spectral analysis of the meteor captured on April 25, 2024, over the state of Mato Grosso

Felipe C. Franco (1), Matheus A. G. Costa (2), Daniela C. Mourão (1)

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CBDO 165

Space debris mitigation study through orbital redirection using a heliosynchronous solar sail

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Universidade Federal do Recôncavo da Bahia (UFRB) and Universidad de Zaragoza, Pedro Cerbuna,  
Faculdade de Engenharia e Ciências de Guaratinguetá (FEG - UNESP)

CBDO 166

Utilization of stochastic filters for Angles-Only Orbit Determination

Carlos Eduardo de Sa Amaral Oliveira, Willer Gomes dos Santos

Aeronautics Institute of Technology

CBDO 167

The three-dimensional creep tide theory - Averaged equations and applications to long-term evolution of close-in exoplanetary systems

Raphael Alves-Silva, Sylvio Ferraz-Mello

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CBDO 168

Equilibrium Points and Surface Dynamics About Comet 67P/Churyumov-Gerasimenko

Luís Ceranto, Andre Amarante

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CBDO 169

Dynamics of Rotation of Small Satellites of Saturn

Leonardo Vicente Jin Tetsuya Aoki, Nelson Callegari Júnior

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CBDO 170

Asteroids were born bigger: An implication of surface mass ablation during gas-assisted implantation into the asteroid belt

Rafael Ribeiro de Sousa, André Izidoro, Rogério Deienno

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CBDO 171

Dynamics of a solar sail under resonant conditions with solar radiation pressure perturbation. Case of Mercury and Earth.

João Pedro Fagionato Agostinho, Tadashi Yokoyama, Victor Hugo Mota, Marcelo Domingos Marchesin

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CBDO 172

Study of Hippocamp Dynamics: Future Resonant Scenario 13:11

Victor Hugo Mota, Tadashi Yokoyama, Marcos Tadeu dos Santos, João Pedro Fagionato Agostinho

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#### CBDO 173

Assessing the Collision Potential of Space Debris after Fragmentation

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#### CBDO 174

Analysis of the stable regions present within the Kepler-20 system.

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#### CBDO 175

Particle regions around Quaoar system

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#### CBDO 176

Revisiting derivative-free nonlinear Kalman filtering: implementation aspects of algorithms CDKF, DDKF, CKF, AND UKF

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#### CBDO 177

Fundamentals of Dynamical Astronomy and Elementary Applications in Resonant Dynamics of Saturn's Small Satellites - The Pan-Prometheus Case

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#### CBDO 178

Development of an eletronic system for a CanSat

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#### CBDO 179

Current scenario of space debris removal mechanisms

Celestino, C. C.; Moraes Silva, Isabeli  
CECS/ UFABC; ProPes/UFABC

CBDO 180

Space Debris Evolution: Case Studies

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CBDO 181

Quasi-critical and quasi-heliosynchronous orbits

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CBDO 182

Mathematical model of the orbital elevator motion

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CBDO 183

Method of satellite constellation design for on-orbit servicing of multisatellite space systems on orbits with given parameters

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CBDO 184

NEOMOD: Dynamical Model of Near-Earth Objects from a Decade of Catalina Sky Survey Observations

David Nevorsný

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CBDO 185

Ocultações estelares por satélites de Objetos Transnetunianos

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CBDO 186

Geodetic and Geophysical Characterization of Ganymede with GALA, the Ganymede Laser Altimeter

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CBDO 187

Pathways of survival for exomoons and inner exoplanets

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CBDO 188

Dynamic of Centaurs, link with the giant planets and other small body populations

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CBDO 189

Dynamics of a non-homogeneous straight segment: relative equilibria, stability, periodic solutions and singularities

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CBDO 190

Attitude Representations of Artificial Satellites and Applications

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