SYLVIO FERRAZ MELLO

1.0 DADOS PESSOAIS

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1.1 TÍTULOS

Bacharel e Licenciado (Física), Universidade de São Paulo, 1959.
Especialista (Física), Universidade de São Paulo, 1962.
Docteur d'Etat ès Sciences Mathématiques, Académie de Paris, 1967.
Professor Pleno, Instituto Tecnológico de Aeronáutica, 1971.
Livre Docente, Universidade de São Paulo, 1975.
Professor Titular, Universidade de São Paulo, 1980.
Doutor Honoris Causa, Observatoire de Paris, 2007
Professor Emérito (IAG), Universidade de São Paulo, 2007.

1.2 ENSINO E PESQUISA

Faculdade de Filosofia, Ciências e Letras da Universidade de São Paulo, Departamento de Física, 1960 - 1962.
Instituto Tecnológico de Aeronáutica, São José dos Campos, 1967 - 1974.
Instituto de Astronomia, Geofísica e Ciências Atmosféricas da Universidade de São Paulo, 1973 - (oficialmente aposentado desde 1999).
Observatório Nacional, 1999 - 2001.

1.3 POSIÇõES TEMPORÁRIAS

1962-1967 - Stagiaire Etranger, Bureau des Longitudes, Paris (France)
1972 - Lecturer, Dept. of Engineering Mechanics and Aerospace Engineering, University of Texas at Austin (USA)
1984 - Professor, Universidade do Porto (Portugal)
1985,1992 e 2007 - Gäst, Institut für Astronomie. Universität Wien (Austria)
1986 - Professeur Associé, Université Paris 7 (France)
1987, 1995, 1998 - Profesor, Universidad Nacional de La Plata (Argentina)
1988 e 1993 - Professeur Visitant, Université Paris 7 (France)
1989 - Astronome, Observatoire de la Côte d'Azur - Nice (France)
1993 e 1997 - Professor de Disciplina de Pós-Graduação, Instituto de Física, USP.
1994 - Gästprofessor. Formal- und Naturwissenchaftliche Fakultät der Universität Wien (Austria)
1998 - Profesor Visitante, Universidad Nacional de Cordoba (Argentina).
2001 – Professeur Invité, Université Pierre et Marie Curie - Paris 6 (France)
2009 – Visiting Fellow. Isaac Newton Institute for Mathematical Sciences. University of Cambridge (UK)

1.4 INFORMAÇÕES ADICIONAIS

BROUWER AWARD, American Astronomical Society, Division of Dynamical Astronomy, 2015
Editor honorário de “Celestial Mechanics and Dynamical Astronomy”, 2017-
Editor chefe de “Celestial Mechanics and Dynamical Astronomy”, 2001-2017
Diretor, Observatório Nacional, 1999 - 2001.
Diretor, Instituto Astronômico e Geofísico da Universidade de São Paulo, 1981 - 1985.
Associate Editor de "Celestial Mechanics and Dynamical Astronomy", 1989 -2001.
International Editor de "Celestial Mechanics", 1981 -1988.
Editor de "Ciência e Cultura" (Revista da Sociedade Brasileira para o Progresso da Ciencia), 1986 -1989.
Membro do Editorial Board de "Vistas in Astronomy" (Pergamon Press, Oxford) 1993 - 1997.
Membro Titular, Academia Brasileira de Ciências.
Membro Titular, Academia de Ciências da América Latina (Membro do Conselho, 1988 - 1996)

Membro, TWAS. The Academy of Sciences of the Developing World
Membro. ACIESP. Academia de Ciencias do Estado de São Paulo (Presidente, 2009-2010)
Academico Correspondente. Real Academia de Ciências de Zaragoza
Membro Correspondente. Bureau des Longitudes (Paris)
Grã-Cruz da Ordem Nacional do Mérito Científico
Nome de asteróide: (5201) Ferraz-Mello.
Biografado “Who’s who in the World 2009”
Chairman: Simpósio No. 152 da International Astronomical Union (Angra dos Reis, 1991).
Co-chairman: Simpósios IAU No. 172 (Paris, 1995), No. 229 (Buzios, 2005), No. 249 (Suzhou, China, 2007), No. 263 (Rio de Janeiro, 2009) e Colóquio IAU No. 172 (Namur, Bélgica,1998)
Chairman: 6th , 7th e 8th Alexander von Humboldt Colloquium on Celestial Mechanics (Bad Hofgastein, Austria, 2004, 2008 e 2011).
Co-Investigator. CoRoT space mission. 2009-2019
Membro do Steering Committee da Divisão de Astronomia Fundamental , International Astronomical Union, 2013-2018.
Membro do Steering Committee da Divisão de Sistemas Planetários e Astrobiologia, International Astronomical Union, 2018-2021,2021-2024..
Presidente da Comissão de Mecânica Celeste da International Astronomical Union,1994 - 1997.
Presidente do Working Group "Orbits and Ephemerides of Planetary Satellites", International Astronomical Union, 1976 - 1979.
Diretor Executivo da Fundação Universitária para o Vestibular - FUVEST, 1985 - 1989.
Coordenador Adjunto ao Diretor Científico da Fundação de Amparo à Pesquisa do Estado de São Paulo - FAPESP (área de Ciências Exatas e Engenharia), 1987 - 1994.
Presidente da Comissão Brasileira de Astronomia, 1991 - 1994.
Presidente do Conselho Diretor do Laboratório de Computação Científica de Alto Desempenho - LCCA (USP), 1996 - 1998.
Membro do Committee on Publication Ethics (COPE), 2010 -
Membro da Comissão Organizadora do XX Colóquio Brasileiro de Dinâmica Orbital – 2021
Membro do Scientific International Organising Committee da escola de verão “From Stardust to Extrasolar Planets: Dynamics of exoplanetary and solar system bodies”. University of the Highlands & Islands, Sabhal Mor Ostaig, Gaelic College, Skye, Scotland. 2021
.

1.5 BOLSA DE PESQUISADOR VIGENTE
CNPQ 302742/2015-8 Bolsa de Pesquisador I A (anteriores: 302783/2007-5 e 306146/2010-0)

2.1 - PUBLICAÇÕES - Sumário

| | |
|---|---|
| Livros Publicados no Brasil: | 4 |
| Livros Publicados no exterior: | 2 |
| Obras coletivas (livros) editadas no Brasil | 2 |
| Obras coletivas (livors) editadas no exterior: | 11 |
| Artigos publicados em revistas arbitradas: | 140 |
| Artigos em Proceedings e Capítulos de Livros: | 88 |
| Outras publicações: | 8 |

2.1.1 PUBLICAÇõES (LIVROS)
S.Ferraz-Mello, Dynamics of the Galilean Satellites of Jupiter: An introductory treatise, IAG-USP, São Paulo, 1979.
Re-edição 2021 - http://www.astro.iag.usp.br/~sylvio/DGSX.pdf
S.Ferraz-Mello, Escolha de Sítio para o Observatório Astrofísico Brasileiro, CNPq-Observatório Nacional, 1982.
S.Ferraz-Mello, Dinamika Galileievikh Sputnikov Yupitera. Vvodnii kurs, Izd-vo Mir, Moscow, 1983.
S.Ferraz-Mello, Canonical Perturbation Theories, Degenerate Systems and Resonance, Springer, Astrophysics and Space Science Library, Vol. 345 (ISBN-10:0-387-38900-8) xiv+341 pp. New York 2007.
S.Ferraz-Mello, C.Grotta-Ragazzo e L. Ruiz dos Santos Dissipative Forces in Celestial Mechanics, Sociedade Brasileira de Matemática (30o Colóquio Brasileiro de Matemática), Rio de Janeiro 2015.
S.Ferraz-Mello, Caos e Planetas. Dinâmica Caótica e Sistemas Planetários Editora Livraria da Física (ISBN 978-65-5563-153-1) 230pp, São Paulo, 2021.

2.1.2 PUBLICAÇõES (OBRAS COLETIVAS EDITADAS)

P.E.Nacozy & S.Ferraz-Mello (eds.), Natural and Artificial Satellite Motion, Univ.Texas Press, Austin, 1979.

S.Ferraz-Mello & P.E.Nacozy (eds.),The Motion of Planets and Natural and Artificial Satellites, IAG-USP, São Paulo, 1983.

S.Ferraz-Mello & W.Sessin (eds.), Resonances in the Motion of Planets Satellites and Asteroids, IAG-USP, São Paulo, 1985.

S.Ferraz-Mello (ed.), Chaos, Resonance and Collective Dynamical Phenomena in the Solar System, Kluwer Acad. Publ., Dordrecht, 1992.

S.Ferraz-Mello, B.Morando & J.-E.Arlot (eds.) Dynamics, Ephemerides and Astrometry of the Solar System, Kluwer Acad. Publ., Dordrecht, 1996.

J.C.Muzzio, S.Ferraz-Mello & J.Henrard (eds.) Chaos in the Gravitational N-body systems. Kluwer Acad. Publ., Dordrecht, 1996.

D.Lazzaro, R.Vieira Martins, S.Ferraz-Mello, J.Fernández & C.Beaugé (eds.) Solar System Formation and Evolution, Astron. Soc. Pacific, San Francisco, 1998

J.Henrard & S.Ferraz-Mello (eds.), Impact of Modern Dynamics on Astronomy, Kluwer Acad.Publ., Dordrecht, 1999

A. Celletti, S.Ferraz-Mello & J. Henrard (eds.) Modern Celestial Mechanics: from Theory to Applications, Kluwer Acad. Publishers, Dordrecht, 2002.

R. Dvorak & S. Ferraz-Mello (eds.), A comparison of the Dynamical Evolution of Planetary Systems, Springer, Dordrecht, 2005

D. Lazzaro, S.Ferraz-Mello & J.A.Fernandez (eds.), Asteroids, Comets, Meteors, Cambridge University Press, Cambridge(UK), 2006

A. Celletti & S.Ferraz-Mello (eds.), Periodic, Quasi-Periodic and Chaotic Motions in Celestial Mechanics: Theory and Applications, Springer, Dordrecht, 2006.

Y.-S. Sun, S. Ferraz-Mello and J.-L.Zhou (eds.) Exoplanets: Detection, Formation and Dynamics. Cambridge University Press, Cambridge(UK), 2008.

E. Perozzi & S.Ferraz-Mello (eds.). Space Manifold Dynamics. New spaceways for science and exploration. Springer, New York, 2010;

2.1.3 PUBLICAÇõES (PRINCIPAIS ARTIGOS E COMUNICAÇõES)

1963

Aspects Mathématiques du problème de la Pression de Radiation. Séminaires du Bureau des Longitudes de Paris, 2(15).

1964

Sur le problème de la pression de radiation solaire dans la Théorie des Satellites Artificiels. Comptes Rendus Acad. Sciences Paris, 258, 463-466.

Intégrales du Mouvement sous forme trigonometrique pure. Séminaires du Bureau des Longitudes de Paris, 4(5).

1965

Action de la Pression de Radiation sur le mouvement d'un Satellite Artificiel da la Terre. Proc. 14th. International Astronautical Congress, Vol.4, pp.41-50, P.W.N., Warsaw.

1966

Sur la Methode de Von Zeipel. Memorie della Società Astronomica Italiana, 37, 221-233.

Recherches sur le mouvement des Satellites Galiléens de Jupiter. (Thèse de Doctorat d'Etat), Bulletin Astronomique, 3e.série, 1,287-330.

1968

Sur l'Evection de Callisto dans la Théorie de Laplace. Anais Acad. Bras. Ciências, 40, 447-449.

1969

Sur la construction d'orbites absolues planes. Comptes Rendus Acad. Sc. Paris, 268, 198-200.

Sur la construction d'orbites absolues. Le Problème Spatial. Comptes Rendus Acad. Sc. Paris, 268, 985-988.

1971

Sur un Modèle Mathématique pour l'étude des Effects de la Pression de Radiation Solaire sur le Mouvement des Satellites Artificiels. Comptes Rendus Acad. Sc. Paris, 273, 197-200.

1972

Sur l'Application des Transformations de Lie aux Problèmes Resonants de la Mécanique Céleste (S.Ferraz-Mello & R.Vieira Martins) Comptes Rendus Acad. Sc. Paris, 274, 521-524.

Analytical Study of the Earth's Shadowing Effect on Satellite Orbits. Celestial Mechanics, 5,

80-101.
HD 197481: A Periodic dMe Variable Star. (C.A.O.Torres, S.Ferraz-Mello & G.R.Quast), Astrophysical Letters, 11, 13-14.

1973

On Variable dMe Stars (C.A.O.Torres & S.Ferraz-Mello), Astronomy and Astrophysics, 27, 231-236.
EQ Virginis, Internat. Astron. Union Circular No. 2482.

1974

On the Theory of the Galilean Satellites of Jupiter. In The Stability of the Solar System and of Small Stellar Systems (Y.Kozai, ed.). D.Reidel, Dordrecht, pp.167-184.

1975

Problems of the Galilean Satellites of Jupiter. Celestial Mechanics 12, 27-37.

1976

Masses of the Galilean Satellites of Jupiter. Science , 192, 1127-1128
Discussion of the Photographic Observations of the Galilean Satellites in the Period 1930-1970. (S.Ferraz-Mello & L.R.de Paula) Astronomical Journal 81, 127-131.

1978

Une extension de la Méthode de Delaunay. Comptes Rendus Acad. Sciences Paris 286 A, 969-971.
Determination of Periods from Unevenly Spaced Data. (Review Paper) In Colóquio de Sistemas Binarios Cerrados (R.Vilhena de Moraes,ed.) Soc. Astron. Brasil., São Paulo, pp.146-171.
A Second-Order Theory of the Galilean Satellites of Jupiter. In Dynamics of Planets and Satellites and Theories of their Motion (V.Szebehely, ed.) D.Reidel, Dordrecht, pp.209-236.

1979

Satellites (Report) Trans. Intern. Astron. Union, 17 A,140-143
Periodic Orbits in a Region of Instability Created by Independent Small Divisors. In Natural and Artificial Satellite Motion, (P.E. Nacozy & S.Ferraz-Mello, eds.), Univ.Texas Press, Austin, pp.283-292.
The Motion of the Galilean Satellites by Numerical Averaging (P.E. Nacozy, R.McKenzie, S.Ferraz-Mello & M.Sato) In Natural and Artificial Satellite Motion, (P.E. Nacozy & S. Ferraz-Mello, eds.), Univ.Texas Press, Austin, pp.161-172.

1981

Estimation of Periods from Unequally Spaced Observations. Astronomical Journal 86, 619-624.
Elimination of Secular Terms Generated by the Coupling of Perturbations. Celestial Mechanics 25, 293-296.

1982

Discussion of the Photographic Observations of the Galilean Satellites in the Period 1913-1928. (M.Tsuchida, S.Ferraz-Mello & R. Biancale) Astronomical Journal 87, 924-927.
Comparison of Sampson-Lieske Theory of the Galilean Satellites of Jupiter with Observations (R. Biancale, S. Ferraz-Mello & M. Tsuchida) Celestial Mechanics 26, 225-228

1983

On Photographic Observations of the Galilean Satellites. Anais Acad. Bras. Ciências 55, 219-224.
Galilean Satellites: On Observations, Ephemerides and Theories. In The Motion of Planets and Natural and Artificial Satellites (S. Ferraz-Mello & P.E.Nacozy,eds.), IAG-USP, São Paulo, pp.225-231.

A Numerical Averaging Procedure for the Galilean Satellites System (M.Sato, S.Ferraz-Mello & P.E. Nacozy) In The Motion of Planets and Natural and Artificial Satellites (S.Ferraz-Mello & P.E. Nacozy, eds.), IAG-USP, São Paulo, pp.83-89.

1984

Satellite Orbits and Ephemerides (Review Paper) Celestial Mechanics 34, 223-241.
A note on Resonance in Regular Variables and Averaging (S. Ferraz-Mello & W. Sessin) Celestial Mechanics 34, 453-457.
Motion of two planets with periods commensurable in the ratio 2:1. Solutions of the Hori Auxiliary System. (W.Sessin & S.FerrazMello) Celestial Mechanics, 32, 307-332.
The Laplacian Resonance amongst Uranian Inner Satellites (D.Lazzaro, S.Ferraz-Mello & C.Veillet) Astronomy and Astrophysics 140, 33-38.

1985

Resonance in Regular Variables: I- Morphogenetic Analysis of the Orbits in the case of First-Order Resonance. Celestial Mechanics 35, 209-220.
Resonance in Regular Variables: II- Formal Solutions for Central and Non-Central First-Order

Resonance. Celestial Mechanics 35, 221-234.

First-Order Resonances in Satellite Orbits (Review Paper) In Resonances in the Motion of Planets,Satellites and Asteroids (S.Ferraz-Mello & W.Sessin, eds.) IAG-USP, pp.37-52.

On the expansion of the principal part of the Disturbing Function for Mean-Motions Ratio close to 1 (S.Ferraz-Mello & J.Sousa Neto) Resonances in the Motion of Planets, Satellites and Asteroids (S. Ferraz-Mello & W.Sessin, eds.) IAG-USP, pp.187-192.

The 2:1 Resonance in the Enceladus-Dione System (S. Ferraz-Mello & M.Sato) Resonances in the Motion of Planets, Satellites and Asteroids (S.Ferraz-Mello & W.Sessin, eds.) IAG-USP, pp.105-112.

1987

Chaos and Secular Variations of Planar Orbits in 2:1 Resonance with Dione (S.Ferraz-Mello & R.Dvorak) Astronomy and Astrophysics,179, 304-310.

A Semi-Analytical Solution for the Eccentricities and Longitudes of Pericenter of Uranian Satellites. (D.Lazzaro, S.Ferraz-Mello & R.Vieira Martins) Astronomy and Astrophysics 182, 150-180.

Averaging the Elliptic Asteroidal Problem Near a First-Order Resonance, Astronomical Journal, 94, 208-212.

Expansion of the Disturbing Force-Function for the Study of High-Eccentricity Librations. Astronomy and Astrophysics 183, 397-402

Comparison of Bretagnon's VSOP 82 Theory to the Observations of Neptune (R.S.Gomes & S.Ferraz-Mello) Astronomy and Astrophysics , 185, 327-331.

Search and Determination of Periodicity (S.Ferraz-Mello & G.R.Quast) In Exercises in Astronomy (J. Kleczek, ed.), D. Reidel, Dordrecht pp.231-235.

Orbital Resonances amongst Planetary Satellites (Review Paper) In Dynamics of the Solar System (M.Sidlichovsky, ed.) Astron. Inst Czech. Acad. Sciences, Praha, pp.49-57.

On the Origin of Gaps in the Distribution of Minor Planets. In Dynamics of the Solar System (M. Sidlichovsky, ed.) Astron. Inst. Czech. Acad. Sciences, Praha, pp. 121-124.

1988

On Resonance (Review Paper), Celestial Mechanics, 43, 69-89.

The High-Eccentricity Libration of the Hildas. Astronomical Journal, 96, 400-408.

Comparison of Bretagnon's VSOP 82 Theory to the Observations of Uranus (R.S.Gomes & S. Ferraz-Mello) Astronomy and Astrophysics 203, 170-174.

Would a Planet X explain the Discrepancies in the Motions of Uranus and Neptune? (R.S.Gomes & S.Ferraz-Mello) Anais Acad. Brasil. Ciências 60, 399-403.

On a Class of Integrable Hamiltonians. Rev. Soc. Brasil. Progr. Ciência (Ciência Cult.) 40, 598-600.

Analytical Methods and Orbital Resonance (S.Ferraz-Mello & J.Henrard) (Report) Trans. Astron. Intern. Union 20 A, 20-23.

High-Eccentricity Libration. In Long-Term Dynamical Behaviour of Natural and Artificial N-Body Systems (A.E.Roy, ed.), Kluwer, Dordrecht, pp.245-250.

Etude Théorique des Corotations. C.R. des Journées de Planétologie (M.Festou & D.Chabod, eds.) Obs.Besançon, Besançon, pp.107-110.

Le Mouvement des Asteroides en Libration de Haute Excentricité et les Lacunes de Kirkwood. In Developpements Recents en Planétologie Dynamique (D.Benest & Cl.Froeschle, eds.) Observ. Nice, Nice pp.115-126.

1989

A Semi-Numerical Expansion of the Averaged Disturbing Function for some Very-High-Eccentricity Orbits. Celestial Mechanics 45, 65-68.

A Very-High-Eccentricity Asymmetric Expansion of the Disturbing Function near Resonances of Any Order. (S.Ferraz-Mello & M.Sato) Astronomy and Astrophysics 225, 541-547.

Stationary Averaged Motions of an Artificial Satellite in FirstOrder Resonance with the Earth. (P.H.C.N.de Lima Jr., S.Ferraz- Mello & J.L.Sagnier). In Orbital Dynamics of Natural and Artificial Objects (R.Vieira Martins et al., eds.) Observ. Nacional, Rio de Janeiro, pp. 99-114.

1990

Regular Motions of Resonant Asteroids (Review Paper). Revista Mexicana de Astronomia e Astrofísica 21, 569-580.

Averaging Hamiltonian Systems. In Modern Methods in Celestial Mechanics (D.Benest & C.Froeschlé, eds). Edit. Frontières, Gif-sur-Yvette, pp. 151-211.

Mouvements Astéroidaux de Trés Haute Excentricité. CR 2ème. Table Ronde de Planétologie Dynamique (D.Benest et al., eds). Observatoire de la Côte d'Azur - Nice, pp.203-209.

1991

A Model for the Study of Very-High-Eccentricity Asteroidal Motion.The 3:1 resonance (S.Ferraz Mello & J.C.Klafke). In Predictability, Stability and Chaos in N-body Dynamical Systems (A.E.Roy, ed.) Plenum Press, New York, pp. 177-184.

1992

The Method of Delaunay. Notes Scientifiques et Techniques du Bureau des Longitudes. S 36,1-14.

Very-high eccentricity librations at some higher order resonances (J.C.Klafke, S.Ferraz-Mello & T.Michtchenko) In Chaos, Resonance and Collective Dynamical Phenomena in the Solar System. (S.Ferraz-Mello, ed.) Kluwer Academic Publishers (Dordrecht, Holanda), pp.153-158.

Corotation solutions in the elliptic asteroidal problem with Stokes drag (C.Beaugé & S.Ferraz-Mello) In Chaos, Resonance and Collective Dynamical Phenomena in the Solar System (S.Ferraz-Mello, ed.) Kluwer Academic Publishers (Dordrecht, Holanda), pp.355-358.

Corotations in some higher-order resonances (S.Ferraz-Mello, M.Tsuchida & J.C.Klafke) In Chaos, Resonance and Collective Dynamical Phenomena in the Solar System (S.Ferraz-Mello, ed.) Kluwer Academic Publishers (Dordrecht, Holanda), pp.167-170.

Averaging the Elliptic Asteroidal Problem with a Stokes drag. In Interrelations between Physics and Dynamics for Minor Bodies in the Solar System. Ed. Frontières (Gif-sur-Yvette, França), pp.45-60.

1993

On symmetrical planetary corotations (S.Ferraz Mello, M.Tsuchida & J.C. Klafke). Celestial Mechanics and Dynamical Astronomy, 55, 25-45.

The high-eccentricity libration of the Hildas. II. Synthetic-theory approach (T.Michtchenko & S.Ferraz-Mello). Celestial Mechanics and Dynamical Astronomy, 56, 121-129.

Resonance trapping in the primordial solar nebula: The case of a Stokes drag dissipation. (C.Beaugé & S.Ferraz Mello) Icarus, 103, 301-318.

Capture of grains into resonances through Poynting-Robertson Drag (B .Sicardy, C.Beaugé, S.Ferraz-Mello, D.Lazzaro & F.Roques) Celestial Mechanics and Dynamical Astronomy, 57, 373-390.

1994

On the convergence domain of the Laplacian expansion of the disturbing function. Celestial Mechanics and Dynamical Astronomy, 58, 37-52.

Resonance capture and the formation of the outer planets. (C.Beaugé, S.J.Aarseth e S.Ferraz-Mello) Monthly Notices of the Royal Astronomical Society, 270, 21-34.

Capture in exterior mean-motion resonances due to Poynting-Robertson drag (C.Beaugé e S.Ferraz-Mello) Icarus, 110, 239-260.

Dynamics of the asteroidal 2:1 resonance. Astronomical Journal, 108, 2330-2337.

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Kirkwood gaps and resonant groups (Invited Review Paper) IAU Symposium 160. Asteroids, Comets, Meteors 1993 (A.Milani, M.Di Martino & A.Celino, eds.) Kluwer Acad. Publ. (Dordrecht, Holand) pp. 175-188.

1995

The high-eccentricity libration theory revisited. (T.Gallardo & S.Ferraz-Mello) Celestial Mechanics and Dynamical Astronomy, 62, 145-165.

Comparative study of the asteroidal motion in the 3/2 and 2/1 resonances with Jupiter. I. Planar model. (T.Michtchenko & S.Ferraz-Mello) Astronomy and Astrophysics, 303, 945-963.

The depletion of the asteroidal belt at resonances (Invited Lecture) (S.Ferraz-Mello, R.Dvorak & T.A.Michtchenko) In From Newton to Chaos: Modern Techniques for Understanding and Coping with Chaos in N-body Dynamical Systems. (A.E.Roy & B.A.Steves, eds.) Plenum Press, New York, pp. 157-169.

On the convergence of the disturbing function. In From Newton to Chaos: Modern Techniques for Understanding and Coping with Chaos in N-body Dynamical Systems. (A.E.Roy & B.A.Steves, eds.) Plenum Press, New York, pp. 97-98.

The technique of Lie Transforms in Hamiltonian Systems. In Perturbation Theory and Chaos in Nonlinear Dynamics with emphasis to Celestial Mechanics (J.Hagel, M.Cunha & R.Dvorak, eds.) Universidade da Madeira, Funchal e Institut für Astronomie Universität Wien. pp. 43-58.

1996

Comparative study of the asteroidal motion in the 3/2 and 2/1 resonances with Jupiter. II. Three-dimensional model. (T.Michtchenko & S.Ferraz-Mello) Astronomy and Astrophysics, 310, 1021-1035

On the Hecuba gap, In Dynamics, Ephemerides and Astrometry of the Solar System, (S.Ferraz-

Mello, B.Morando & J.E.Arlot eds.), Kluwer Acad. Publ., Dordrecht, pp.177-182.
Dynamics and Cosmogony of Asteroids in Resonance. (Review Paper) Proceedings of the XXth SAB Annual Meeting, Sociedade Astronômica Brasileira, São Paulo, pp. 1-8.
Chaotic Transitions in Asteroidal Resonances, (Review Paper) (S.Ferraz-Mello, J.C.Klafke, T.Michtchenko, D.Nesvorny) Celestial Mechanics and Dynamical Astronomy, 64, 93-105.
Chaos and the Dynamics of Resonant Asteroids (Review Paper), (S.Ferraz-Mello & T.Michtchenko) Revista Mexicana de Astronomia y Astrofísica. (Série Conferencias), 4, 27-34.

1997

Understanding Libration via Time-frequency analysis (T.Gallardo & S.Ferraz-Mello) Astronomical Journal, 113, 863-870.
Chaotic diffusion in the 2/1 asteroidal resonance. An application of the frequency map analysis. (D.Nesvorny & S.Ferraz-Mello) Astronomy and Astrophysics, 320, 672-680.
A Symplectic Mapping approach to the study of the Stochasticity in Asteroidal Resonances. Celestial Mechanics and Dynamical Astronomy, 65, 421-437.
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On Hamiltonian Averaging Theories and Resonance. Celestial Mechanics and Dynamical Astronomy. 65, 39-50.
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On the asteroidal population of the first-order Jovian resonances. (D.Nesvorný & S.Ferraz-Mello) Icarus. 130, 247-258.
Escape of Asteroids from the Hecuba gap (T.Michtchenko & S.Ferraz-Mello) Planetary and Space Science. 45, 1587-1593.
Mutual Perturbations of the Planetary Companions of Pulsar B 1257+12. In Visual Double Stars: Formation, Dynamics and Evolutionar Tracks (J.A.Docobo, A.Elipe & H.MacAllister, eds.), Kluwer Publ., Dordrecht, pp. 215-220.

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