

JOURNAL PUBLICATIONS

(Key: **D. M. Sanchez**, *D. M. Sanchez's students*)

30. *Mateus, D. A. C.; Prado, A. F. B.; Sanchez, D. M.; Moraes, R. V.*, “Dynamics of a Particle in 3:1 Tesserel Resonance with the Dwarf Planet Haumea,” *Symmetry*, Volume 14, Article 1378, 23 pages, **2022**, DOI: 10.3390/sym14071378
29. *Marchi, L. O.; Sanchez, D. M.; Venditti, F. C. F.; Prado, A. F. B.; Misra, A.*, “On the effects of the solar radiation pressure on the deviation of asteroids,” *Revista Mexicana de Astronomía y Astrofísica*, Volume 57, Issue 2, pp. 279-295, **2021**, DOI: 10.22201/ia.01851101p.2021.57.02.03
28. Aljbaae, S.; Souchay, J.; Carruba, V.; **Sanchez, D. M.**; Prado, A. F. B. A., “First approximation for spacecraft motion relative to (99942) Apophis,” *Romanian Astronomical Journal*, Volume 31, pp. 317-338, **2021**.
27. Aljbaae, S.; **Sanchez, D. M.**; Prado, A. F. B. A.; Souchay, J.; Terra, M. O.; Negri; R. B.; *Marchi, L. O.*, “First approximation for spacecraft motion relative to (99942) Apophis,” *Romanian Astronomical Journal*, Volume 31, pp. 241-264, **2021**.
26. *Santos, L. B. T.; Marchi, L. O.; Aljbaae, S.; Sousa-Silva, P.; Sanchez, D. M.; Prado, A. F. B. A.*, “A particle-linkage model for elongated asteroids with three-dimensional mass distribution,” *Monthly Notices of the Royal Astronomical Society*, Volume 502, Issue 3, pp. 4277-4289, **2021**, DOI: 10.1093/mnras/stab198
25. *Santos, L. B. T.; Marchi, L. O.; Sousa-Silva, P.; Sanchez, D. M.; Aljbaae, S.; Prado, A. F. B. A.*, “Dynamics around an asteroid modeled as a mass tripole,” *Revista Mexicana de Astronomía y Astrofísica*, Volume 56, Issue 2, pp. 269-286, **2020**, DOI: 10.22201/ia.01851101p.2020.56.02.09
24. **Sanchez, D. M.**; Deienno, R.; Prado, A. F. B. A.; Howell. K. C., “Perturbation Maps and the ring of Haumea,” *Monthly Notices of the Royal Astronomical Society*, Volume 496, Issue 2, pp. 2085-2097, **2020**, DOI: 10.1093/mnras/staa1696
23. Aljbaae, S.; Prado, A. F. B. A.; **Sanchez, D. M.**; Hussmann, H., “Analysis of the orbital stability close to the binary asteroid (90) Antiope,” *Monthly Notices of the Royal Astronomical Society*, Volume 496, Issue 2, pp. 1645-1654, **2020**, DOI: 10.1093/mnras/staa1634
22. *Cavalca, M. P. O.; Gomes, V. M.; Sanchez, D. M.*, “Mid-range natural orbits around the triple asteroid 2001 SN₂₆₃” *The European Physical Journal Special Topics*, Volume 229, Issue 8, pp 1557-1572, **2020**, DOI: 10.1140/epjst/e2020-900093-0
21. Venditti, C. F. F.; *Marchi, L. O.*; Misra, A. K.; **Sanchez, D. M.**; Prado, A. F. B. A., “Dynamics of tethered asteroid systems to support planetary defense” *The European Physical Journal Special Topics*, Volume 229, Issue 8, pp 1463-1477, **2020**, DOI: 10.1140/epjst/e2020-900183-y

20. *Cavalca, M. P. O.*; Prado, A. F. B. A.; Gomes, V. M.; **Sanchez, D. M.**, “Quasi Satellite Orbits’ to observe a possible small moon of Pallas,” *New Astronomy*, Volume 75, Article 101317, **2020**, DOI: 10.1016/j.newast.2019.101317
19. **Sanchez, D. M.**; Prado, A. F. B. A., “Searching for Less-Disturbed Orbital Regions Around the Near-Earth Asteroid 2001 SN₂₆₃,” *Journal of Spacecraft and Rockets*, Volume 56, Issue 6, pp. 1775-1785, **2019**, DOI: 10.2514/1.A34402
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17. Aljbaae, S.; Chanut, T. G. G.; Prado, A. F. B. A.; Carruba, V.; Hussmann, H.; Souchay, J.; **Sanchez, D. M.**, “Orbital stability near the (87) Sylvia system,” *Monthly Notices of the Royal Astronomical Society*, Volume 486, Issue 2, pp. 2557-2569, **2019**, DOI: 10.1093/mnras/stz998
16. *Cavalca, M. P. O.*; Prado, A. F. B. A.; V. M. Gomes; **Sanchez, D. M.**, “Searching for midrange planar orbits to observe Deimos,” *Revista Mexicana de Astronomía y Astrofísica*, Volume 55, Issue 2, pp. 305-319, **2019**, DOI: ia.01851101p.2019.55.02.16
15. **Sanchez, D. M.**; Sukhanov, A. A.; Prado, A. F. B. A., “Optimal trajectories to Kuiper belt objects,” *Revista Mexicana de Astronomía y Astrofísica*, Volume 55, Issue 1, pp. 39-54, **2019**
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13. *Almeida Jr, A. K.*; Prado, A. F. B. A.; Yokoyama, T.; **Sanchez, D. M.**, “Spacecraft motion around artificial equilibrium points,” *Nonlinear Dynamics*, Volume 91, Issue 3, pp. 1473-1489, **2018**, DOI: 10.1007/s11071-017-3959-2
12. *Santos, L. B. T.*; Prado, A. F. B. A.; **Sanchez, D. M.**, “Lifetime of a spacecraft around a synchronous system of asteroids using a dipole model,” *Astrophysics and Space Science*, Volume 362, Article 202, 12 pp., **2017**, DOI: 10.1007/s10509-017-3177-x
11. *Oliveira, G. M. C.*; Prado, A. F. B. A.; **Sanchez, D. M.**; Gomes, V. M., “Orbital transfers in an asteroid system considering the solar radiation pressure,” *Astrophysics and Space Science*, Volume 362, Article 187, 13 pp., **2017**, DOI: 10.1007/s10509-017-3162-4
10. *Santos, L. B. T.*; Prado, A. F. B. A.; **Sanchez, D. M.**, “Equilibrium points in the restricted synchronous three-body problem using a mass dipole model,” *Astrophysics and Space Science*, Volume 362, Article 61, 11 pp., **2017**, DOI: 10.1007/s10509-017-3030-2

9. *Almeida Jr, A. K.; Prado, A. F. B. A.; Sanchez, D. M.; Yokoyama, T.*, “Searching for artificial equilibrium points to place satellites ‘above and below’ L3 in the Sun-Earth system,” Revista Mexicana de Astronomía y Astrofísica, Volume 53, Issue 2, pp. 349-359, **2017**
8. *Silva Neto, J. B.; Sanchez, D. M.; Prado, A. F. B. A.; Smirnov, G. V.*, “On the use of controlled radiation pressure to send a satellite to a graveyard orbit,” Revista Mexicana de Astronomía y Astrofísica, Volume 53, Issue 2, pp. 321-332, **2017**
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5. **Sanchez, D. M.**; Yokoyama, T.; Prado, A. F. B. A., “Study of Some Strategies for Disposal of the GNSS Satellites,” Mathematical Problems in Engineering, Volume 2015, Article ID: 382340, **2015**, DOI: 10.1155/2015/382340
4. **Sanchez, D. M.**; Prado, A. F. B.; Yokoyama, T., “On the Effects of Each Term of the Geopotential Perturbation Along the Time I: Quasi-circular Orbits,” Advances in Space Research, Volume 54, Issue 6, pp. 1008-1018, **2014**, DOI: 10.1016/j.asr.2014.06.003
3. **Sanchez, D. M.**; Yokoyama, T.; Brasil, P. I. O.; Cordeiro, R. R., “Some initial conditions for Disposed Satellites of the Systems GPS and Galileo Constellations,” Mathematical Problems in Engineering, Volume 2009, Article ID: 510759, **2009**, DOI: 10.1155/2009/510759
2. Stuchi, T.; Yokoyama, T.; Correa. A. A.; Solorzano, C. R. H.; **Sanchez, D. M.**; Winter, S. M. G.; Winter, O. C., “Dynamics of a Spacecraft and normalization around Lagrangian points in the Neptune-Triton System,” Advances in Space Research, Volume 42, Issue 10, pp. 1715-1722, **2008**, DOI: 10.1016/j.asr.2007.04.007
1. Yokoyama, T.; Vieira-Neto, E.; Winter, O. C.; **Sanchez, D. M.**; Brasil, P. I. O., “On the Evection Resonance and Its Connection to the Stability of Outer Satellites,” Mathematical Problems in Engineering, Volume 2008, Article ID: 251978, **2008**, DOI: 10.1155/2008/251978

PEER-REVIEWED CONFERENCE PAPERS

(Key: **D. M. Sanchez, D. M. Sanchez’s students**)

6. *Cavalca, M. P. O.; Prado, A. F. B.; Gomes, V. M.; Sanchez, D. M.*, “Orbital maneuvers to form a constellation of small satellites from a single large spacecraft,” XIX Colóquio Brasileiro de Dinâmica Orbital – CBDO, **2018**, In: 2019, Journal of Physics: Conference Series, Volume 1365, Article: 012017, DOI: 10.1088/1742-6596/1365/1/012017

5. *Santos, L. B. T.*; Prado, A. F. B. A.; **Sanchez, D. M.**, “Equilibrium points in the asteroid 2001SN₂₆₃,” XVIII Colóquio Brasileiro de Dinâmica Orbital – CBDO, **2016**, In: 2017, Journal of Physics: Conference Series, Volume 911, Article: 012023, DOI: 10.1088/1742-6596/911/1/012023
4. *Silva Neto, J. B.*; Prado, A. F. B. A.; **Sanchez, D. M.**; Formiga, J. K. S., “On the use of a variable coefficient of reflectivity associated with an augmented area-to-mass ratio to de-orbit CubeSats,” XVIII Colóquio Brasileiro de Dinâmica Orbital – CBDO, **2016**, In: 2017, Journal of Physics: Conference Series, Volume 911, Article: 012009, DOI: 10.1088/1742-6596/911/1/012009
3. *Oliveira, G. M. C.*; Prado, A. F. B. A.; **Sanchez, D. M.**, “Close approach maneuvers around an oblate planet,” XVII Colóquio Brasileiro de Dinâmica Orbital – CBDO, **2014**, In: 2015, Journal of Physics: Conference Series, Volume 641, Article: 012008, DOI: 10.1088/1742-6596/641/1/012008
2. **Sanchez, D. M.**; Yokoyama, T.; Prado, A. F. B. A., “On The Use Of Resonance To Discard Satellites Of GNSS,” 22nd International Congress of Mechanical Engineering, **2013**, Ribeirão Preto - SP, Brazil
1. **Sanchez, D. M.**; Yokoyama, T.; Brasil, P. I. O.; Cordeiro, R. R., “On the Choice of the Initial Conditions for Disposed Satellites of GPS and Galileo Constellations,” Brazilian Symposium on Aerospace Engineering and Applications / 3rd CTA-DLR Workshop on Data Analysis and Flight Control, **2009**, São José dos Campos - SP, Brazil

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(Key: **D. M. Sanchez**, *D. M. Sanchez's students*)

16. **Sanchez, D. M.**; Prado, A. F. B. A., “Stability of highly inclined orbits around the asteroid (153591) 2001 SN₂₆₃,” AAS/AIAA Astrodynamics Specialist Conference, **August 2019**, Portland, ME, USA, AAS 19-798
15. **Sanchez, D. M.**; Prado, A. F. B. A., “Perturbation maps for a spacecraft around the near-Earth Asteroid (153591) 2001 SN₂₆₃,” AAS/AIAA Astrodynamics Specialist Conference, **August 2018**, Snowbird, UT, USA, AAS 18-320
14. *Santos, L. B. T.*; Sousa-Silva, P. A.; **Sanchez, D. M.**; Prado, A. F. B. A., “Searching for orbits around equilibrium points in a binary asteroid system modeled as a mass dipole,” AAS/AIAA Astrodynamics Specialist Conference, **August 2018**, Snowbird, UT, USA, AAS 18-396
13. Prado, A. F. B. A.; **Sanchez, D. M.**; *Brejão, L. F.*; *Santos, L. B. T.*, “Studying the motion of a spacecraft orbiting an asteroid modeled as an asymmetric mass dipole,” AAS/AIAA Astrodynamics Specialist Conference, **August 2018**, Snowbird, UT, USA, AAS 18-380

12. *Marchi, L. O.*; Venditti, F. C. F.; **Sanchez, D. M.**; Prado, A. F. B. A., “Dynamical effects of solar radiation pressure on the deflection of Near-Earth asteroids,” AAS/AIAA Astrodynamics Specialist Conference, **August 2018**, Snowbird, UT, USA, AAS 18-350
11. *Silva Neto, J. B.*; **Sanchez, D. M.**; Prado, A. F. B. A., “Co-Orbital Orbits Around the Asteroid 65803 Didymos (1996 GT),” 28th AIAA/AAS Space Flight Mechanics Meeting, **January 2018**, Kissimmee, FL, USA, AIAA 2018-0719, DOI: 10.2514/6.2018-0719
10. **Sanchez, D. M.**; Prado, A. F. B., “On the Use of Mean Motion Resonances to Explore the Haumea System,” AAS/AIAA Astrodynamics Specialist Conference, **August 2017**, Stevenson, WA, USA, AAS 17-762
9. *Silva Neto, J. B.*; **Sanchez, D. M.**; Prado, A. F. B. A., “On the Use of Solar Radiation Pressure to Eject a Spacecraft Orbiting The Asteroid 65803 Didymos (1996 GT),” AAS/AIAA Astrodynamics Specialist Conference, **August 2017**, Stevenson, WA, USA, AAS 17-764
8. **Sanchez, D. M.**; Howell, K. C.; Prado, A. F. B. A., “Search for stable regions in the irregular Haumea-Namaka binary system,” 27th AAS/AIAA Space Flight Mechanics Meeting, **February 2017**, San Antonio, TX, USA, AAS 17-305
7. **Sanchez, D. M.**; Howell, K. C.; Prado, A. F. B. A., “On the dynamics of a spacecraft in the irregular Haumea-Hi'iaka binary,” 26th AAS/AIAA Space Flight Mechanics Meeting, **February 2016**, Napa, CA, USA, AAS 16-320
6. *Oliveira, G. M. C.*; Prado, A. F. B. A.; **Sanchez, D. M.**; Gomes, V. M., “Traveling Between the Earth-Moon Lagrangian Points and the Earth,” 14th International Conference on Space Operations, **May 2016**, Daejeon, Korea, AIAA 2016-2558, DOI: 10.2514/6.2016-2558
5. **Sanchez, D. M.**; Prado, A. F. B. A.; Yokoyama, T., “Searching for periodic and quasi-periodic orbits of spacecrafats on the Haumea system,” AAS/AIAA Astrodynamics Specialist Conference, **August 2015**, Vail, CO, USA, AAS 15-770
4. **Sanchez, D. M.**; Prado, A. F. B. A.; Yokoyama, T., “Gravitational Capture and Maintenance of a Spacecraft Around Pluto,” AIAA/AAS Astrodynamics Specialist Conference, **August 2014**, San Diego, CA, USA, AIAA 2014-4280, DOI: 10.2514/6.2014-4280
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1. Yokoyama, T.; **Sanchez, D. M.**; Brasil, P. I. O.; Vieira Neto, E.; Winter, O. C., “On the Derivation of the Semi Major Axis for the Stability of Prograde and Retrograde Satellites,” 6th Brazilian Conference on Dynamics, Control and Their Application, 2007, São José do Rio Preto - SP, Brazil