

**PUBLICATION  
YEAR 2013**

ADÁMEK, Karel, STUHLÍK, Zdeněk. Magnetized tori in the field of Kerr superspinars. In *Classical and Quantum Gravity*: IOP Publishing Ltd., 2013, roč. 30, č. 20, s. 205007-205035. ISSN 1361-6382. DOI: 10.1088/0264-9381/30/20/205007, IF: 3.562

CREMASCHINI, Claudio, KOVÁŘ, Jiří, SLANÝ, Petr, STUHLÍK, Zdeněk, KARAS, Vladimír. Kinetic theory of equilibrium axisymmetric collisionless plasmas in off-equatorial tori around compact objects. In *The Astrophysical Journal - Supplement Series* 09/2013: IOP Publishing Ltd., 2013, roč. 209, č. 1, ISSN: 0067-0049, DOI: 10.1088/0067-0049/209/1/15, IF: 16.238

CREMASCHINI, Claudio, STUHLÍK, Zdeněk, TESSAROTTO, Massimo. Collisionless energy-independent kinetic equilibria in axisymmetric magnetized plasmas. In *Physical Review E: Amer Physical Soc.*, 2013, roč. 88, č. 3, ISSN: 1539-3755, DOI: 10.1103/PhysRevE.88.033105, IF: 2.313

CREMASCHINI, Claudio, STUHLÍK, Zdeněk, TESSAROTTO, Massimo. Kinetic theory of quasi-stationary collisionless axisymmetric plasmas in the presence of strong rotation phenomena. In *Physics Of Plasmas: Amer. Inst. Physics*, 2013, roč. 20, č. 5, ISSN: 1070-664X, DOI: 10.1063/1.4807037, IF: 2.376

CREMASCHINI, Claudio, STUHLÍK, Zdeněk. Kinetic theory for gravitating systems of collisionless neutral matter. In *International Journal Of Modern Physics D: World Scientific Publ. Co. Pte. Ltd.*, 2013, roč. 22, č. 13, ISSN: 0218-2718, DOI: 10.1142/S0218271813500776, IF: 1.03

CREMASCHINI, Claudio, STUHLÍK, Zdeněk. Magnetic loop generation by collisionless gravitationally bound plasmas in axisymmetric tori. In *Physical Review E: Amer Physical Soc.*, 2013, roč. 87, č. 4, ISSN: 1539-3755, DOI: 10.1103/PhysRevE.87.043113, IF: 2.313

CREMASCHINI, Claudio, TESSAROTTO, Massimo. Statistical treatment of the electromagnetic radiation-reaction problem: Evaluation of the relativistic Boltzmann-Shannon entropy. In *Physical Review E: Amer Physical Soc.*, 2013, roč. 87, č. 3, ISSN: 1539-3755, DOI: 10.1103/PhysRevE.87.032107, IF: 2.313

CREMASCHINI, Claudio, TESSAROTTO, Massimo. Symmetry properties of the exact em radiation-reaction equation for classical extended particles and antiparticles. In *International Journal Of Modern Physics A: World Scientific Publ. Co. Pte. Ltd.*, 2013, roč. 28, č. 18, ISSN: 0217-751X, DOI: 10.1142/S0217751X13500863, IF: 1.127

CREMASCHINI, Claudio, TESSAROTTO, Massimo. Theory of spatially non-symmetric kinetic equilibria for collisionless plasmas. In *Physics Of Plasmas: Amer. Inst. Physics*, 2013, roč. 20, č. 1, ISSN: 1070-664X, DOI: 10.1063/1.4773440, IF: 2.376

HORNY, Luboš, MACH, Pavel, MASARIK, Jozef, HUBAČ, Ivan, WILSON, Stephen. Theoretical study of the HeN<sub>22+</sub> dication. In *Molecular Physics: TAYLOR & FRANCIS LTD.* 2013, roč. 111, č. 24, s. 3801-3807, ISSN 0026-8976, DOI: 10.1080/00268976.2013.793829, IF: 1.670

KLOSOVÁ, Hana, ŠTĚTINSKÝ, Jiří, BRYJOVÁ, Iveta, HLEDÍK, Stanislav, KLEIN, Leo. Objective evaluation of the effect of autologous platelet concentrate on post-operative scarring in deep burns. In *Burns*, 2013, roč. 39, č. 6, s. 1263-1276, ISSN 03054179, DOI: 10.1016/j.burns.2013.01.020, IF 1.799

KOLOŠ, Martin, STUHLÍK, Zdeněk. Dynamics of current-carrying string loops in the Kerr naked-singularity and black-hole spacetimes. In *Physical Review D: American Physical Society*, 2013, roč. 88, č. 6, ISSN:1550-7998, DOI: 10.1103/PhysRevD.88.065004, IF: 4.691

KOTRLOVÁ, Andrea, STUHLÍK, Zdeněk, TÓRÓK Gabriel. Multi-Resonance Orbital Model Applied to High-Frequency Quasi-Periodic Oscillations Observed in Sgr A\*. In *Acta Astronomica: Copernicus Foundation Polish Astronomy*, 2013, roč. 63, č. 2, str. 275-293, ISSN:0001-5237, IF: 2.682

KOVÁŘ, Jiří. Spiral motion formation in astrophysics, In *European Physical Journal Plus: Springer Heidelberg*, 2013, roč. 128, č. 11, č. článku: 142, ISSN: 2190-5444, DOI: 10.1140/epjp/i2013-13142-9, IF: 1,302.

MAZUR, Grzegorz, VINCENT, Frederic, MAGNUS, Johansson, ŠRÁMKOVÁ, Eva, TÓRÓK Gabriel, BAKALA, Pavel, ABRAMOWICZ, Marek. Towards modeling quasi-periodic oscillations of microquasars with oscillating slender tori. In *Astronomy & Astrophysics: EDP Sciences SA*, 2013, roč. 554, ISSN:0004-6361, DOI: 10.1051/0004-6361/201321488, IF: 5.084

SCHEE, Jan, STUHLÍK, Zdeněk, PETRÁSEK, Martin: Influence of the cosmic repulsion on the MOND model of the Magellanic Cloud motion in the field of Milky Way. In *Journal Of Cosmology And Astroparticle Physics: IOP Publishing Ltd.*, 2013, 12, 026, ISSN:1475-7516, DOI:10.1088/1475-7516/2013/12/026, IF: 6.036

SCHEE, Jan, STUHLÍK, Zdeněk. Profiled spectral lines generated in the field of Kerr superspinars. In *Journal Of Cosmology And Astroparticle Physics: IOP Publishing Ltd.*, 2013, č. 04,005, ISSN:1475-7516, DOI: 10.1088/1475-7516/2013/04/005, IF: 6.036

SLANÝ, Petr, KOVÁŘ, Jiří, STUHLÍK, Zdeněk, KARAS, Vladimír. Charged Tori in Spherical Gravitational and Dipolar Magnetic Fields. In *The Astrophysical Journal -Supplement Series 09/2013: IOP Publishing Ltd.*, 2013, roč. 205, č. 1, s. 3-19, ISSN:0067-0049, DOI: 10.1088/0067-0049/205/1/3, IF: 16.238

SLANÝ, Petr, POKORNÁ, Miroslava, STUHLÍK, Zdeněk, Equatorial circular orbits in Kerr-anti-de Sitter spacetimes. In *General Relativity And Gravitation: Springer /Plenum Publishers*, 2013, roč. 45, č. 12, str. 2611-2633, ISSN:0001-7701, DOI: 10.1007/s10714-013-1606-x, IF: 1.902

STUHLÍK, Zdeněk, KOTRLOVÁ, Andrea, TÓRÓK Gabriel. Multi-resonance orbital model of high-frequency quasi-periodic oscillations: possible high-precision determination of black hole and neutron star spin. In *Astronomy & Astrophysics: EDP Sciences SA*, 2013, roč. 552, č. A10, s. 1-43, ISSN:0004-6361, DOI: 10.1051/0004-6361/201219724, IF: 5.084

STUHLÍK, Zdeněk, SCHEE, Jan. Ultra-high-energy collisions in the superspinning Kerr geometry. In *Classical And Quantum Gravity: IOP Publishing Ltd.*, 2013, roč. 30, č. 7, ISSN:0264-9381, DOI: 10.1088/0264-9381/30/7/075012, IF: 3.562

TESSAROTTO, Massimo, CREMASCHINI, Claudio, TESSAROTTO, Marco. On the conditions of validity of the Boltzmann equation and Boltzmann H-theorem. In *European Physical Journal Plus: Springer Heidelberg*, 2013, roč. 128, č. 3, ISSN:2190-5444, DOI: 10.1140/epjp/i2013-13032-2, IF: 1.302

TESSAROTTO, Massimo, CREMASCHINI, Claudio. Ab initio construction of the 2-point velocity difference PDF for incompressible Navier-Stokes fluids. In *European Physical Journal Plus: Springer Heidelberg*, 2013, roč. 128, č. 8, ISSN:2190-5444, DOI: 10.1140/epjp/i2013-13084-2, IF: 1.302

TESSAROTTO, Massimo, CREMASCHINI, Claudio. Mathematical properties of the Navier-Stokes dynamical system for incompressible Newtonian fluids. In *Physica A-Statistical Mechanics And Its*

Applications: Elsevier Science BV, 2013, roč. 392, č. 18, s. 3962-3969, ISSN:0378-4371, DOI: 10.1016/j.physa.2013.04.054, IF: 1.676

TURSUNOV, Arman, KOLOŠ, Martin, AHMEDOV, Bobomurat, STUHLÍK, Zdeněk. Dynamics of an electric current-carrying string loop near a Schwarzschild black hole embedded in an external magnetic field. In *Physical Review D: Amer Physical Soc.*, 2013, roč. 87, č. 12, ISSN:1550-7998, DOI: 10.1103/PhysRevD.87.125003, IF: 4.691

TURSUNOV, Arman, KOLOŠ, Martin, ABDUJABBAROV Ahmadjon, AHMEDOV, Bobomurat, STUHLÍK, Zdeněk. Acceleration of particles in spacetimes of black string. In *Physical Review D: Amer Physical Soc.*, 2013, roč. 88, č. 12, IF: 4.691

URBANEC, Martin, MILLER, John, STUHLÍK, Zdeněk. Quadrupole moments of rotating neutron stars and strange stars. In *Monthly Notices Of The Royal Astronomical Society: Oxford Uni Press*, 2013, roč. 433, č. 3, str. 1903-1910, ISSN:0035-8711, DOI: 10.1093/mnras/stt858, IF: 5.521