List of publications — Miroslav Brož

We list refereed papers, proceedings contributions, abstracts and popular articles of MB, together with relevant citations recorded in the literature.

Theses

1 **M. Brož**, 1999, Orbitální vývoj asteroidálních fragmentů způsobený vlivem gravitace planet a tepelnými efekty, Diploma Thesis, Charles University.

1 D. Vokrouhlický, P. Farinella, The Yarkovsky Seasonal Effect on Asteroidal Fragments: A Nonlinearized Theory for Spherical Bodies, *Astrophys. J.* **118**, 3049, 1999.
2 V. Carruba, J.A. Burns, W. Bottke, D. Nesvorný, Orbital evolution of the Gefion and Adeona asteroid families: close encounters with massive asteroids and the Yarkovsky effect, *Icarus* **162**, 308, 2003.
3 V. Carruba, Dynamics of asteroid families and irregular satellites of jovian planets, PhD Dissertation, Cornell University, 2004.
4 D. Nesvorný, W.F. Bottke, Detection of the Yarkovsky effect for main-belt asteroids, *Icarus* **170**, 324, 2004.
5 V. Carruba, T.A. Michtchenko, F. Roig, S. Ferraz-Mello, D. Nesvorný, On the V-type asteroids outside the Vesta family. I. Interplay of nonlinear secular resonances and the Yarkovsky effect: the cases of 956 Elisa and 809 Lundia, *Astron. Astrophys.* **441**, 819, 2005.
6 V. Carruba, F. Roig, T.A. Michtchenko, S. Ferraz-Mello, D. Nesvorný, Modeling close encounters with massive asteroids: a Markovian approach. An application to the Vesta family, *Astron. Astrophys.* **465**, 315, 2007.
7 V. Carruba, T.A. Michtchenko, D. Lazzaro, On the V-type asteroids outside the Vesta family. II. Is (21238) 1995 WV7 a fragment of the long-lost basaltic crust of (15) Eunomia? *Astron. Astrophys.* **473**, 967, 2007.

2 **M. Brož**, 2006, Yarkovsky effect and the Dynamics of the Solar System, PhD Thesis, Charles University.

Refereed papers

1 D. Vokrouhlický and **M. Brož**, 1999, An improved model of the seasonal Yarkovsky force for the regolith–covered asteroid fragments, *Astron. Astrophys.* **350**, 1079.

1 J.N. Spitale and R. Greenberg, The Yarkovsky effect on regolith-covered bodies, *BAAS* **32**, 2000.
2 E.J. Lyytinen and J. Van Flandern, *Earth Moon Planets* **82-3**, 149, 2000.
3 J.N. Spitale and R. Greenberg, Numerical evaluation of the general Yarkovsky effect: Effects on semimajor axis, *Icarus*, **149**, 222, 2001.
4 J.N. Spitale and R. Greenberg, Numerical evaluation of the general Yarkovsky effect: Effects on eccentricity and longitude of periapse, *Icarus*, **156**, 211, 2001.
5 J.N. Spitale and R. Greenberg, Numerical evaluation of the Yarkovsky effect on orbital elements of asteroids, *LPSC* **32**, 1346, 2001.
6 A.A. Guillens, R. Vieira Martins and R.S. Gomes, A global study of the 3/1 resonance neighborhood: A search for unstable asteroids, *Astron. J.* **124**, 2322, 2002.
7 J.N. Spitale, *Detailed study of the Yarkovsky effect on asteroids and solar system implications*, PhD Dissertation, University of Arizona, 2002.
8 E. Skoglov, The influence on the spin vectors of asteroids from the Yarkovsky effect, *Astron. Astrophys.* **393**, 673, 2002.
9 D.P. O'Brien, *The Collisional and Dynamical Evolution of the Main-Belt, NEA, and TNO Populations*, PhD Dissertation, University of Arizona, 2004.
10 M. Mueller, Surface Properties of Asteroids from Mid-Infrared Observations and Thermophysical Modeling, *PhD Thesis*, Freie Universität Berlin, 2007 (http://www.diss.fu-berlin.de/2007/471/indexe.html)

2 D. Vokrouhlický, **M. Brož**, P. Farinella and Z. Knežević, 2001, Yarkovsky–driven leakage of Koronis family members: I. The case of 2953 Vysheslavia, *Icarus* **150**, 78.

1 V. Zappalá, A. Cellino and A. Dell'Oro, A search for the collisional parent bodies of large NEAs, *Icarus* **157**, 280, 2002.
2 A.A. Guillens, R. Vieira Martins and R.S. Gomes, A global study of the 3/1 resonance neighborhood: A search for unstable asteroids, *Astron. J.* **124**, 2322, 2002.
3 D. Nesvorný and W.F. Bottke, Direct detection of the Yarkovsky effect for main-belt asteroids, *Icarus* **170**, 324, 2004.
4 A. Dell'Oro, G. Bigongiari, P. Paolicchi and A. Cellino, Asteroid families: evidence of ageing of the proper elements, *Icarus* **169**, 341, 2004.
5 A. Lemaitre, Asteroid family classification from very large catalogs, in: *Dynamics of Populations of Planetary Systems*, IAU Colloquium 197, Cambridge University Press, 2005, p. 135.
6 T. Monthé-Diniz, F. Roig and J.M. Carvano, Reanalysis of asteroid families structure through visible spectroscopy, *Icarus* **174**, 54, 2005.
7 A. Dell'Oro and A. Cellino, The random walk of Main Belt asteroids: orbital mobility by non-destructive collisions, *Mon. Not. R. Astron. Soc.* **380**, 399, 2007.

3 W.F. Bottke, D. Vokrouhlický, **M. Brož**, D. Nesvorný and A. Morbidelli, 2001, Dynamical spreading of asteroid families by the Yarkovsky effect, *Science* **294**, 1693.

1 M. Guzzo, Z. Knežević and A. Milani, Probing the Nekhoroshev statbility of asteroid orbits, *Celest. Mech. Dyn. Astr.*, **83**, 121, 2002.
2 J.R. Minkel, New studies sharpen picture of near-Earth asteroids, *Scientific American*, Nov 27, 2001.
3 P. Michel, W. Benz, P. Tanga and D. Richardson, Collisions and gravitational reaccumulation: Forming asteroid families and satellites, *Science* **294**, 1696, 2001.
4 D.C. Richardson, Rocks that go bump in the night, *Nature* **417**, 697, 2002.
5 V. Zappalá, A. Cellino and A. Dell'Oro, A search for the collisional parent bodies of large NEAs, *Icarus* **157**, 280, 2002.
6 T.A. Michtchenko, D. Lazzaro, S. Ferraz-Mello and F. Roig, Origin of the basaltic asteroid 1459 Magnya. A dynamical and mineralogical study of the outer main belt, *Icarus* **158**, 343, 2002.
7 A.A. Guillens, R. Vieira Martins and R.S. Gomes, A global study of the 3/1 resonance neighborhood: A search for unstable asteroids, *Astron. J.* **124**, 2322, 2002.
8 E.I. Chiang, A collisional family in the classical Kuiper belt, *Astrophys. J.* **573**, L65, 2002.
9 P. Michel *et al.*, Formation of asteroid families by catastrophic disruption: Simulations with fragmentation and gravitational reaccumulation, *Icarus* **160**, 10, 2002.
10 C. Schreiber, Kann der Yarkovsky-Effekt die Asteroiden neu gruppieren?, *Telepolis*, `http://www.heise.de/tp/r4/artikel/16/16261/1.html`
11 P. Michel, W. Benz and D.C. Richardson, Disruption of fragmented parent bodies as the origin of asteroid families, *Nature* **421**, 608, 2003.
12 V. Trimble and M. Aschwanden, Astrophysics in 2002, *Publ. Astron. Soc. Pac.* **115**, 514, 2003.
13 Z. Knežević and A. Milani, Proper element catalogues and asteroid families, *Astron. Astrophys.* **403**, 1165, 2003.
14 K. Tsiganis, *Chaotic motion of asteroids*, PhD Thesis, University of Thessaloniky, 2002.
15 R.D. Lorentz and J.N. Spitale, The Yarkovsky effect as a heat engine, *Icarus* **170**, 229, 2004.
16 P. Michel, W. Benz and D.C. Richardson, Catastrophic disruption of pre-shattered parent bodies, *Icarus* **168**, 420, 2004.
17 U. Penco, A. Dell'Oro, P. Paolicchi *et al.*, Yarkovsky depletion and asteroid collisional evolution, *Planet. Sp. Science* **52**, 1087, 2004.
18 A. Dell'Oro, G. Bigongiari, P. Paolicchi and A. Cellino, Asteroid families: evidence of ageing of the proper elements, *Icarus* **169**, 341, 2004.
19 A. Lemaitre, Asteroid family classification from very large catalogs, in: *Dynamics of Populations of Planetary Systems*, IAU Colloquium 197, Cambridge University Press, 2005, p. 135.
20 S. Foglia and G. Masi, New clusters for highly inclined main-belt asteroids, *Minor Planet Bulletin* **31**, 100, 2004.
21 A. Cellino, A. Dell'Oro and V. Zappalà, Asteroid families: open problems, *Planet. Sp. Sci.* **52**, 1075, 2004.
22 W.S. Koon, J.E. Marsden, S.D. Ross, *et al.*, Geometric mechanics and the dynamics of asteroid pairs, *Ann. New York Acad. Sci.* **1017**, 11, 2004.
23 P. Michel, W. Benz and D.C. Richardson, Catastrophic disruption of asteroids and family formation: a review of numerical simulations including both fragmentation and gravitational reaccumulations, *Planet. Sp. Sci.* **52**, 1109, 2004.
24 D.P. O'Brien, *The Collisional and Dynamical Evolution of the Main-Belt, NEA, and TNO Populations*, PhD Dissertation, University of Arizona, 2004.
25 A.A. Christou, Gravitational scattering within the Himalia group of jovian prograde irregular satellites, *Icarus* **174**, 215, 2005.
26 T. Monthé-Diniz, F. Roig and J.M. Carvano, Reanalysis of asteroid families structure through visible spectroscopy, *Icarus* **174**, 54, 2005.
27 P. Tanga, Impact of Gaia on dynamics and evolution of the Solar System, in *The Three-Dimensional Universe with Gaia*, C. Turon, K.S. O'Flaherty, M.A.C. Perryman (Eds.), p. 243, 2005.
28 M. Ćuk and J.A. Burns, Effects of thermal radiation on the dynamics of binary NEAs, *Icarus* **176**, 418, 2005.
29 R. Gil-Hutton, Identification of families among highly inclined asteroids, *Icarus* **183**, 93, 2006.
30 T. Ito and R. Malhotra, Dynamical transport of asteroid fragments from the nu6 resonance, *Adv. Sp. Res.* **38(4)**, 817, 2006.
31 P. Vernazza et al., Physical characterization of the Karin family, *Astron. Astrophys.* **460**, 945, 2006.
32 M. Delbò, A. dell'Oro, A.W. Harris, S. Mottola and M. Mueller, Thermal inertia of near-Earth asteroids and implications for the magnitude of the Yarkovsky effect, *Icarus* **190**, 236, 2007.
33 K. Tsiganis, Z. Knežević and H. Varvoglis, Reconstructing the orbital history of the Veritas family, *Icarus* **186**, 484, 2007.
34 M. Kaasalainen, J. Ďurech, B.D. Warner, Y.N. Krugly and N.M. Gaftonyuk, Acceleration of the rotation rate of asteroid 1862 Apollo by radiation torques, *Nature* **446**, 420, 2007.
35 A. Dell'Oro and A. Cellino, The random walk of Main Belt asteroids: orbital mobility by non-destructive collisions, *Mon. Not. R. Astron. Soc.* **380**, 399, 2007.
36 V. Carruba and T.A. Michtchenko, A frequency approach to asteroid families' identification, *Astron. Astrophys.* **475**, 1145, 2007.
37 T. Ito and K. Tanikawa, Trends in 20th century celestial mechanics, *Publ. Nat. Astron. Obs. Japan* **9**, 55, 2007; at http://library.nao.ac.jp/naopublication/9-34-1.pdf.
38 S. Fornasier, F. Marzari, E. Dotto, M.A. Barucci and A. Migliorini, Are the E-type asteroids (2867) Steins, a target of the Rosetta mission, and NEA (3103) Eger remnants of an old asteroid family? *Astron. Astrophys.* **474**, L29, 2007.
39 R. Pavlovič and M. Guzzo, Fulfillment of the conditions for the application of the Nekhoroshev theorem to the Koronis and Veritas asteroid families, *Mon. Not. R. Astron. Soc.* **384**, 1575, 2008.

4 D. Nesvorný, A. Morbidelli, D. Vokrouhlický, W.F. Bottke and **M. Brož**, 2002, The Flora family: a case of the dynamically dispersed collisional swarm?, *Icarus* **157**, 155.

1 T.A. Michtchenko, D. Lazzaro, S. Ferraz-Mello and F. Roig, Origin of the basaltic asteroid 1459 Magnya. A dynamical and mineralogical study of the outer main belt, *Icarus* **158**, 343, 2002.

2 P. Michel *et al.*, Formation of asteroid families by catastrophic disruption: Simulations with fragmentation and gravitational reaccumulation, *Icarus* **160**, 10, 2002.
3 A. Cellino, V. Zappalà and E.F. Tedesco, Near-Earth objects: Origins and need of physical characterization, *Meteorit. Planet. Sci.* **37**, 1965, 2002.
4 B. Schmitz, T. Haggstrom and M. Tassinari, Sediment-dispersed extraterrestrial chromite traces a major asteroid disruption event, *Science* **300**, 961, 2003.
5 Z. Knežević and A. Milani, Proper element catalogues and asteroid families, *Astron. Astrophys.* **403**, 1165, 2003.
6 K. Tsiganis, *Chaotic motion of asteroids*, PhD Thesis, University of Thessaloniky, 2002.
7 A. Dell'Oro, G. Bigongiari, P. Paolicchi and A. Cellino, Asteroid families: evidence of ageing of the proper elements, *Icarus* **169**, 341, 2004.
8 A. Cellino, A. Dell'Oro and V. Zappalà, Asteroid families: open problems, *Planet. Sp. Sci.* **52**, 1075, 2004.
9 P.R. Heck, B. Schmitz, H. Baur, *et al.*, Fast delivery of meteorites to Earth after a major asteroid collision, *Nature* **430**, 323, 2004.
10 A. Lemaitre, Asteroid family classification from very large catalogs, in: *Dynamics of Populations of Planetary Systems*, IAU Colloquium 197, Cambridge University Press, 2005, p. 135.
11 E.R.D. Scott and L. Wilson, Meteoritic and other constraints on the internal structure and impact history of small asteroids, *Icarus* **174**, 46, 2005.
12 H. Scholl, F. Marzari and P. Tricarico, Dynamics of Mars Trojans, *Icarus* **175**, 397, 2005.
13 E.F. Tedesco, A. Cellino and V. Zappalà, The statistical asteroid model I. The main-bel population for diameters greater than 1 km, *Astron. J.* **129**, 2869, 2005.
14 S.J. Kenyon and B.C. Bromley, Prospects for detection of catastrophic collisions in debris disks, *Astron. J.* **130**, 269, 2005.
15 A.A. Christou, Gravitational scattering within the Himalia group of jovian prograde irregular satellites, *Icarus* **174**, 215, 2005.
16 D.P. O'Brien and R. Greenberg, Collisional and dynamical evolution of the main-belt and NEA size distributions, *Icarus* **178**, 179, 2005.
17 T. Monthé-Diniz, F. Roig and J.M. Carvano, Reanalysis of asteroid families structure through visible spectroscopy, *Icarus* **174**, 54, 2005.
18 A. Bishoff, E.R.D.Scott, K. Metzler and C.A. Goodrich, Nature and origin of meteoritic breccias, in: *Meteorites and the Early Solar System II*, Eds. D.S. Lauretta and H.Y. McSween, Univ. of Arizona Press, Tucson, p. 679, 2006.
19 S.J. Kenyon and B.C. Bromley, Terrestrial planet formation I. The transition from oligarchic growth to chaotic growth, *Astron. J.*, **131**, 1837, 2006.
20 R. Gil-Hutton, Identification of families among highly inclined asteroids, *Icarus* **183**, 1, 2006.
21 A. Alvarez-Candal, R. Duffard, D. Lazzaro and T. Michtchenko, The inner region of the asteroid Main Belt: a spectroscopic and dynamical analysis, *Astron. Astrophys.* **459**, 969, 2006.
22 K. Tsiganis, Z. Knežević and H. Varvoglis, Reconstructing the orbital history of the Veritas family, *Icarus* **186**, 484, 2007.
23 M. Mueller, Surface Properties of Asteroids from Mid-Infrared Observations and Thermophysical Modeling, *PhD Thesis*, Freie Universität Berlin, 2007 (http://www.diss.fu-berlin.de/2007/471/indexe.html)
24 R.C. Greenwood, B. Schmitz, J.C. Bridges, R. Hutchison and I.A. Franchi, Disruption of the L chondrite parent body: New oxygen isotope evidence from Ordovician relict chromite grains, *Earth Planet. Sci. Lett.* **262**, 204, 2007.
25 J.C. Bridges, B. Schmitz, R. Hutchison, R.C. Greenwood, M. Tassinari and I.A. Franch, Petrographic classification of middle ordovician fossil meteorites from Sweden, *Meteorit. Planet. Sci.* **42**, 1781, 2007.
26 S. Kelley, The geochronology of large igneous provinces, terrestrial impact craters, and their relationship to mass extinctions on Earth, *J. Geolog. Soc.* **164**, 923, 2007.
27 A. Bouvier, J. Blichert-Toft, J.D. Vervoort, P. Gillet and F. Albarède, The case for old basaltic shergottites, *Earth Planet. Sci. Lett.* **266**, 105, 2008.

5 **M. Brož**, D. Vokrouhlický, F. Roig, D. Nesvorný, W.F. Bottke and A. Morbidelli, 2005, Yarkovsky origin of the unstable asteroids in the 2/1 mean motion resonance with Jupiter, *Mon. Not. R. Astr. Soc.* **359**, 1437.

1 J. Vaubaillon, P. Lamy, and L. Jorda, On the mechanisms leading to orphan meteoroid streams, *Mon. Not. R. Astron. Soc.* **370**, 1841, 2006.
2 G.C. de Elia and A. Brunini, Collisional and dynamical evolution of the main belt and NEA populations, *Astron. Astrophys.* **466**, 1159, 2007.
3 K. Tanikawa and T. Ito, Subsystems in a stable planetary system, *Publ. Astron. Soc. Japan* **59**, 989, 2007.
4 W.F. Bottke, D. Vokrouhlický, D.P. Rubincam, D. Nesvorný, The Yarkovsky and Yorp Effects: Implications for Asteroid Dynamics, *Ann. Rev. Earth Planet. Sci.* **34**, 157, 2006.

6 D. Vokrouhlický, **M. Brož**, T. Michałowski, S.M. Slivan, F. Colas, L. Šarounová and F.P. Velichko, 2006, Spin axis of (2953) Vysheslavia and its implications, *Icarus* **180**, 217.

1 S.M. Slivan *et al.*, Rotation rates in the Koronis family, complete to H = 11.2, *Icarus* **195**, 226, 2008.

7 D. Vokrouhlický, **M. Brož**, A. Morbidelli, W.F. Bottke, D. Nesvorný, D. Lazzaro and A.S. Rivkin, 2006, Yarkovsky footprints in the Eos family, *Icarus* **182**, 92.

1 T. Mothé-Diniz and J.M. Carvano, 221 Eos: A remnant of a partially differentiated parent body? *Astron. Astrophys.* **442**, 727, 2005.
2 D. Nesvorný, D. Vokrouhlický, New Candidates for Recent Asteroid Breakups *Astron. J.* **132**, 195, 2006.
3 A. Dell'Oro and A. Cellino, The random walk of Main Belt asteroids: orbital mobility by non-destructive collisions, *Mon. Not. R. Astron. Soc.* **380**, 399, 2007.
4 V. Carruba, F. Roig, T.A. Michtchenko, S. Ferraz-Mello, D. Nesvorný, Modeling close encounters with massive asteroids: a Markovian approach. An application to the Vesta family, *Astron. Astrophys.* **465**, 315, 2007.

5 S. Breiter, H. Michalska, D. Vokrouhlický, W. Borczyk, Radiation-induced torques on spheroids, *Astron. Astrophys.* **471**, 354, 2007.
6 V. Carruba and T.A. Michtchenko, A frequency approach to asteroid families' identification, *Astron. Astrophys.* **475**, 1145, 2007.
7 D. Vokrouhlický, D. Nesvorný, W.F. Bottke, Evolution of Dust Trails into Bands *Astrophys. J.* **672**, 696, 2008.
8 T. Mothé-Diniz, J.M. Carvano, S.J. Bus, R. Duffard and T.H. Burbine, Mineralogical analysis of the Eos family from near-infrared spectra, *Icarus*, **195**, 277, 2008.

8 D. Vokrouhlický, **M. Brož**, W.F. Bottke, D. Nesvorný and A. Morbidelli, 2006, Yarkovsky/YORP chronology of asteroid families, *Icarus* **182**, 118.

1 D. Nesvorný, D. Vokrouhlický, New Candidates for Recent Asteroid Breakups *Astron. J.* **132**, 195, 2006.
2 M. Kaasalainen, J. Ďurech, B.D. Warner, Y.N. Krugly and N.M. Gaftonyuk, Acceleration of the rotation rate of asteroid 1862 Apollo by radiation torques, *Nature* **446**, 420, 2007.
3 A. Dell'Oro and A. Cellino, The random walk of Main Belt asteroids: orbital mobility by non-destructive collisions, *Mon. Not. R. Astron. Soc.* **380**, 399, 2007.
4 G.C. de Elia and A. Brunini, Collisional and dynamical evolution of the main belt and NEA populations, *Astron. Astrophys.* **466**, 1159, 2007.
5 G.C. de Elia and A. Brunini, Collisional and dynamical evolution of the L4 Trojan asteroids, *Astron. Astrophys.* **475**, 375, 2007.
6 V. Carruba, F. Roig, T.A. Michtchenko, S. Ferraz-Mello, D. Nesvorný, Modeling close encounters with massive asteroids: a Markovian approach. An application to the Vesta family, *Astron. Astrophys.* **465**, 315, 2007.
7 D. Vokrouhlický, D. Nesvorný, W.F. Bottke, Evolution of Dust Trails into Bands *Astrophys. J.* **672**, 696, 2008.
8 D. Nesvorny, F. Roig, B. Gladman, D. Lazzaro, V. Carruba, T. Moth-Diniz, Fugitives from the Vesta family, *Icarus* **193**, 85, 2008.
9 M. Micheli and P. Paolicchi, YORP effect on real objects. I. Statistical study, *Astron. Astrophys.*, in press, 2008.

9 D. Vokrouhlický, **M. Brož**, W.F. Bottke, D. Nesvorný and A. Morbidelli, 2006, The peculiar case of the Agnia asteroid family, *Icarus* **183**, 349.

1 D. Nesvorný, D. Vokrouhlický, New Candidates for Recent Asteroid Breakups *Astron. J.* **132**, 195, 2006.
2 V. Carruba and T.A. Michtchenko, A frequency approach to asteroid families' identification, *Astron. Astrophys.* **475**, 1145, 2007.
3 D. Vokrouhlický, S. Breiter, D. Nesvorný, W.F. Bottke, Generalized YORP evolution: Onset of tumbling and new asymptotic states *Icarus* **191**, 636, 2007.
4 S. Breiter, H. Michalska, D. Vokrouhlický, W. Borczyk, Radiation-induced torques on spheroids, *Astron. Astrophys.* **471**, 354, 2007.

10 **M. Brož** and D. Vokrouhlický, 2008, Asteroid families in the first-order resonances with Jupiter, *Mon. Not. R. Astr. Soc.* **390**, 715.

Book chapters

1 W.F. Bottke, D. Vokrouhlický, D.P. Rubincam and **M. Brož**, Dynamical evolution of asteroids and meteoroids using the Yarkovsky effect, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, Tucson 2003), p. 395.

1 A. Dell'Oro *et al.*, Evidences of ageing of orbital elements (a,e) from the observed structure of asteroid families, *Asteroids, Comets and Meteors*, abstract 05-11, p. 53 (2002).
2 A. Morbidelli *et al.*, Origin and evolution of near-Earth objects, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 409.
3 V. Zappalá *et al.*, Physical and dynamical properties of asteroid families, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 619.
4 D. Nesvorný *et al.*, Regular and chaotic dynamics in the mean-motion resonances, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 379.
5 R.P. Binzel *et al.*, Physical properties of Near-Earth Asteroids, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 255.
6 P. Pravec, A.W. Harris and T. Michalowski, Asteroid rotation, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 113.
7 E. Asphaug, E. Ryan and M. Zuber, Asteroid Interiors, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 463.
8 D. Scheeres, D.D. Durda and P.E. Geissler, The fate of asteroid ejecta, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 527.
9 A.W. Harris and J.S.V. Lagerros, Asteroids in the thermal infrared, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 205.
10 T. Burbine *et al.*, Meteoritic parent bodies: Their number and identification, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 669.
11 R.P. Binzel, Spin control for asteroids, *Nature* **425**, 131, 2003.
12 U. Penco, A. Dell'Oro, P. Paolicchi *et al.*, Numerical modelling of main belt collisional evolution: depletion effects, in: it Proceedings of the ACM04 Conference, ESA SP-500, p. 363, 2003.
13 R.D. Lorentz and J.N. Spitale, The Yarkovsky effect as a heat engine, *Icarus* **170**, 229, 2004.
14 U. Penco, A. Dell'Oro, P. Paolicchi *et al.*, Yarkovsky depletion and asteroid collisional evolution, *Planet. Sp. Science* **52**, 1087, 2004.
15 R. Michelsen, Near-Earth Asteroids from discovery to characterization, *PhD Thesis*, N. Bohr Institute for Astronomy, Physics and Geophysics, University of Copenhagen, 2004.

16 A.F. Cheng, Collisional evolution of the asteroid belt, *Icarus* **169**, 357.
17 A. Dell'Oro, G. Bigongiari, P. Paolicchi and A. Cellino, Asteroid families: evidence of ageing of the proper elements, *Icarus* **169**, 341, 2004.
18 D.J. Sheeres, F. Marzari and A. Rossi, Evolution of NEO rotation rates due to close encounters with Earth and Venus, *Icarus* **170**, 312, 2004.
19 A. Cellino, A. Dell'Oro and V. Zappalà, Asteroid families: open problems, *Planet. Sp. Sci.* **52**, 1075, 2004.
20 M. Delbó, *The nature of near-earth asteroids from the study of their thermal infrared emission*, PhD Dissertation, Freie Universität Berlin, 2004.
21 P.R. Heck, B. Schmitz, H. Baur, *et al.*, Fast delivery of meteorites to Earth after a major asteroid collision, *Nature* **430**, 323, 2004.
22 C.R. Chapman, The hazard of near-Earth asteroid impacts on Earth, *Earth. Planet. Sci. Lett.* **222**, 1, 2004.
23 M.V. Sykes, E. Grün, W.T. Reach and P. Jenniskens, Interplanetary dust complex and comets, in *Comets II*, eds. M.C. Festou, H.U. Keller and H.A. Weaver (Tucson, University of Arizona Press), 677, 2004.
24 T. Monthé-Diniz, F. Roig and J.M. Carvano, Reanalysis of asteroid families structure through visible spectroscopy, *Icarus* **174**, 54, 2005.
25 M. Ćuk and J.A. Burns, Effects of thermal radiation on the dynamics of binary NEAs, *Icarus* **176**, 418, 2005.
26 E.F. Tedesco, A. Cellino and V. Zappalà, The statistical asteroid model I. The main-belt population for diameters greater than 1 km, *Astron. J.* **129**, 2869, 2005.
27 H. Scholl, F. Marzari and P. Tricarico, Dynamics of Mars Trojans, *Icarus* **175**, 397, 2005.
28 H. Michałska, *Dynamika podwójnych planetoid pod wplywem efektu Jarkowskiego*, Master Thesis, A. Mickiewicz University, 2005.
29 D.C. Richardson, P. Elankumaran and R.E. Sanderson, Numerical experiments with rubble piles: equilibrium shapes and spins, *Icarus* **173**, 349, 2005.
30 T. Monthé-Diniz and J.M. Carvano, 221 Eos: A remnant of a partially differentiated parent body? *Astron. Astrophys.*, submitted.
31 H. Fu, R. Jedicke, D. Durda, R. Fevig and J.V. Scotti, Identifying near-Earth objects families, *Icarus* **178**, 434, 2005.
32 G. Beekman, I.O. Yarkovsky and the discovery of his effect, *J. Hist. Astron.* **37**, 71, 2006.
33 P. Pravec, Photometric survey of asynchronous binary asteroids, in: *Symposium on Telescope Science*, Eds. B.D. Warner *et al.*, Society for Astronomical Science, p. 61, 2005.
34 P. Pravec *et al.*, Photometric survey of binary near-Earth asteroids, *Icarus* **181**, 63, 2006.
35 J. Virtanen, Asteroid orbital inversion using statistical methods, PhD Thesis, University of Helsinki, 2005 (`http://e-thesis.helsinki.fi/julkaisut/mat/tahti/vk/virtanen/asteroid.pdf`).
36 P. Michel and M. Yoshikawa, Earth impact probability of the asteroid (25143) Itokawa to be sampled by the spacecraft Hayabusha, *Icarus* **179**, 291, 2005.
37 V. Carruba, T.A. Michtchenko, F. Roig, S. Ferraz-Mello and D. Nesvorný, On the V-type asteroids outside the Vesta family. I. Interplay ..., *Astron. Astrophys.* **441**, 819, 2005.
38 P. Tanga, Impact of Gaia on dynamics and evolution of the Solar System, in *The Three-Dimensional Universe with Gaia*, C. Turon, K.S. O'Flaherty, M.A.C. Perryman (Eds.), p. 243, 2005.
39 A.W. Harris, M. Mueller, M. Delbó and S.J. Bus, The surface properties of small asteroids: Peculiar Betulia, a case study, *Icarus* **179**, 95, 2005.
40 H.H. Hsieh and D. Jewitt, Active asteroids: Mystery in the Main Belt, in: *Asteroids, Comets and Meteors*, Eds. J.A. Fernandez and S. Ferraz-Mello, Cambridge University Press, p. 425, 2006.
41 F. Roig and R. Gil-Hutton, Selecting candidate V type asteroids from the analysis of the Sloan Digital Sky Survey colors, *Icarus* **183**, 411, 2006.
42 D.C. Richardson and K.J. Walsh, Binary minor planets, *Ann. Rev. Earth Planet. Sci.* **34**, 47, 2006.
43 R. Gil-Hutton, Identification of families among highly inclined asteroids, *Icarus* **183**, 1, 2006.
44 L.A.M. Benner, M.C. Nolan, S.J. Ostro, J.D. Giorgini, D.P. Pray, A.W. Harris, C. Magri and J.L. Margot, Near-Earth Asteroid 2005 CR37: Radar images and photometry of a candidate contact binary, *Icarus*, **182**, 474, 2006.
45 P. Michel and M. Yoshikawa, Dynamical origin of the asteroid (25143) Itokawa: the target of the sample return Hayabusa space mission, *Astron. Astrophys.* **449**, 817, 2006.
46 K. Whitman, A. Morbidelli and R. Jedicke, The size-frequency distribution of dormant Jupiter family comets, *Icarus* **183**, 101, 2006.
47 D.J. Scheeres, et al., Dynamical configuration of binary near-Earth asteroid (66391) 1999 KW4, *Science* **314**, 1280, 2006.
48 D.J. Scheeres, The dynamical evolution of uniformly rotating asteroids subject to YORP, *Icarus* **188**, 430, 2007.
49 M. Delbò, A. dell'Oro, A.W. Harris, S. Mottola and M. Mueller, Thermal inertia of near-Earth asteroids and implications for the magnitude of the Yarkovsky effect, *Icarus* **190**, 236, 2007.
50 D.J. Scheeres, The dynamics of NEO binary asteroids, in: *Near Earth Objects, our Celestial Neighbors: Opportunity and Risk*, A. Milani, G.B. Valsecchi and D. Vokrouhlický, Eds., Cambridge Univ. Press, p. 177, 2007.
51 P. Pravec, A.W. Harris and B.D. Warner, NEA rotations and binaries, in: *Near Earth Objects, our Celestial Neighbors: Opportunity and Risk*, A. Milani, G.B. Valsecchi and D. Vokrouhlický, Eds., Cambridge Univ. Press, p. 167, 2007.
52 Yu.N. Krugly, et al., Kharkiv study of near-Earth asteroids, in: *Near Earth Objects, our Celestial Neighbors: Opportunity and Risk*, A. Milani, G.B. Valsecchi and D. Vokrouhlický, Eds., Cambridge Univ. Press, p. 385, 2007.
53 A. Cellino, M. Delbò and E.F. Tedesco, Albedo and size of (99942) Apophis from polarimetric observations, in: *Near Earth Objects, our Celestial Neighbors: Opportunity and Risk*, A. Milani, G.B. Valsecchi and D. Vokrouhlický, Eds., Cambridge Univ. Press, p. 451, 2007.
54 A.W. Harris, M. Mueller, M. Delbò and S.J. Bus, Physical characterization of the potentially-hazardous high-albedo asteroid (33342) 1998 WT24 from thermal-infrared observations, *Icarus* **188**, 414, 2007.
55 P. Tanga, M. Delbò, D. Hestroffer, A. Cellino and F. Mignard, Gaia observations of Solar System objects: Impact of dynamics and ground-based observations, *Adv. Sp. Res.* **40**, 209, 2007.
56 R.A. Fevig and U. Fink, Spectral observations of 19 weathered and 23 fresh NEAs and their correlation with orbital parameters, *Icarus* **188**, 175, 2007.

57 D.J. Scheeres, Rotational fission of contact binary asteroids, *Icarus* **189**, 370, 2007.
58 M. Kaasalainen, J. Ďurech, B.D. Warner, Y.N. Krugly and N.M. Gaftonyuk, Acceleration of the rotation rate of asteroid 1862 Apollo by radiation torques, *Nature* **446**, 420, 2007.
59 M. Ćuk, Formation and destruction of small binary asteroids, *Astrophys. J.* **659**, L57, 2007.
60 A. Dell'Oro and A. Cellino, The random walk of Main Belt asteroids: orbital mobility by non-destructive collisions, *Mon. Not. R. Astron. Soc.* **380**, 399, 2007.
61 T. Ito and K. Tanikawa, Trends in 20th century celestial mechanics, *Publ. Nat. Astron. Obs. Japan* **9**, 55, 2007 (http://library.nao.ac.jp/naopublication/9-34-1.pdf).
62 M. Granvik, Asteroid identification using statistical orbital inversion methods, *PhD Thesis*, University of Helsinki, 2007 (http://oa.doria.fi/bitstream/handle/10024/29131/asteroid.pdf?sequence=1).
63 E.G. Fahnestock and D.J. Scheeres, Simulation and analysis of the dynamics of binary near-Earth Asteroid (66391) 1999 KW4, *Icarus* **194**, 410, 2008.
64 M. Delbò, P. Tanga and F. Mignard, On the detection of the Yarkovsky effect on near-Earth asteroids by means of Gaia, *Planet. Sp. Sci.*, in press, 2008.

Proceedings contributions

1 **M. Brož** and D. Vokrouhlický, 2002, The peculiar orbit of Vysheslavia: further hints for its Yarkovsky driven origin, in: *Dynamics of Natural and Artificial Celestial Bodies*, Eds. H. Pretka-Ziomek, E. Wnuk, P.K. Seidelmann, D. Richardson. Kluwer Academic Publishers, Dordrecht, p. 307.

2 D. Vokrouhlický and **M. Brož**, 2002, Interaction of the Yarkovsky-drifting orbits with weak resonances: Numerical evidence and challenges, in: *Modern Celestial Mechanics: from Theory to Applications*, Eds. A. Celletti, S. Ferraz-Mello and J. Henrard, Kluwer Academic Publishers, Dordrecht, p. 467.

3 **M. Brož**, D. Vokrouhlický, F. Roig, D. Nesvorný, W.F. Bottke and A. Morbidelli, 2005, The population of asteroids in the 2:1 mean motion resonance with Jupiter revised, in: *Dynamics of Populations of Planetary Systems*, Eds. Z. Knežević and A. Milani, Cambridge University Press, p. 179.

4 D. Vokrouhlický, **M. Brož**, W.F. Bottke, D. Nesvorný and A. Morbidelli, 2005, Non-gravitational perturbations and the evolution of the asteroid main belt, in: *Dynamics of Populations of Planetary Systems*, Eds. Z. Knežević and A. Milani, Cambridge University Press, p. 145.

5 **M. Brož**, D. Vokrouhlický, A. Morbidelli, D. Nesvorný, W.F. Bottke, F. Roig and D. Čapek, 2005, Non-gravitational forces acting on small bodies, in: *Asteroids, Comets and Meteors*, Eds. D. Lazzaro, S. Ferraz-Mello and J. Fernandez, Cambridge University Press, p. 351.

Abstracts of talks and posters

1 **M. Brož** and D. Vokrouhlický, 1998(Aug), Yarkovsky effects as a source of mobility for the asteroid fragments, presented at IAU Colloquium 173, *Evolution and source regions of asteroids and comets*, Tatranská Lomnica.

2 **M. Brož**, D. Vokrouhlický, P. Farinella and W.F. Bottke, 1999(Oct), Capture of Yarkovsky-driven asteroid orbits into higher-order main-belt resonances, *BAAS* **31**, 1111.

3 D. Vokrouhlický, **M. Brož**, P. Farinella and Z. Knežević, 1999(Oct), Yarkovsky-driven leakage of Koronis family members and the case of 2953 Vysheslavia, *BAAS* **31**, 1111.

1 P. Michel, W. Benz, P. Tanga and D. Richardson, Collisions and gravitational reaccumulation: Forming asteroid families and satellites, *Science* **294**, 1696, 2001.

4 **M. Brož** and D. Vokrouhlický, 2000(Jul), Evolution of the Yarkovsky-driven orbits of meteoroids, in: *The Restless Universe*, presented at the NATO Advanced Study Institute, Blair Atholl.

5 D. Vokrouhlický, **M. Brož**, A. Morbidelli, W.F. Bottke and D. Nesvorný, 2001(Jun), Long-term dynamical diffusion in asteroid families via Yarkovsky effect, poster presented at *Asteroids 2001* conference, Palermo.

1 P. Michel, W. Benz, P. Tanga and D. Richardson, Collisions and gravitational reaccumulation: Forming asteroid families and satellites, *Science* **294**, 1696, 2001.
2 S.F. Dermott *et al.*, Asteroidal dust, in: *Asteroids III*, Eds. W.F. Bottke, A. Cellino. P. Paolicchi and R. Binzel, (Arizona Univ. Press, 2003), p. 423.

6 W.F. Bottke, D. Vokrouhlický, **M. Brož**, D. Nesvorný and A. Morbidelli, 2001(Oct), Dynamical Spreading of the Koronis Family via the Yarkovsky Effect, *BAAS* **33**, 1136.

7 W.F. Bottke, D. Vokrouhlický, A. Morbidelli, D. Nesvorný and **M. Brož**, 2002(Aug), The consequences of the Yarkovsky effect: The legacy of Paolo Farinella, invited talk at *Asteroids, Comets and Meteors*, Berlin.

8 D. Vokrouhlický, **M. Brož**, A. Morbidelli, W.F. Bottke, D. Nesvorný, D. Lazzaro and A. Rivkin, 2002(Aug), Yarkovsky footprints in the Eos family, presented at *Asteroids, Comets and Meteors*, Berlin.

9 **M. Brož**, D. Vokrouhlický, A. Morbidelli, D. Nesvorný and F. Roig, 2002(Aug), A connection of the 2:1 resonance asteroids with the Themis family?, poster at *Asteroids, Comets and Meteors*, Berlin.

10 **M. Brož**, 2002(Aug), A faster version of the SWIFT-MVS integrator and implementation of the Yarkovsky force, poster at *Asteroids, Comets and Meteors*, Berlin.

11 **M. Brož**, D. Vokrouhlický, F. Roig, A. Morbidelli and D. Nesvorný, 2004(Apr), The Yarkovsky delivery of unstable asteroids inside the 2/1 mean motion resonance with Jupiter, *BAAS* **36**, 857.

12 **M. Brož**, D. Vokrouhlický, A. Morbidelli, D. Nesvorný, W.F. Bottke, F. Roig and D. Čapek, 2005 (Aug), Non-gravitational forces acting on small bodies, invited talk at *Asteroids, Comets and Meteors* (IAU Symposium 229), Búzios.

13 **M. Brož**, D. Vokrouhlický, F. Roig, D. Nesvorný, W.F. Bottke and A. Morbidelli, 2005(Aug), Elusive Zhongguos and Griquas — long-lived asteroids inside the J2/1 resonance, poster at *Asteroids, Comets and Meteors* (IAU Symposium 229), Búzios.

14 **M. Brož**, D. Vokrouhlick; W.F. Bottke, D. Nesvorný and A. Morbidelli, 2006(Oct), The long-term evolution of J2/1, J3/2 and J4/3 resonant asteroids during planetary migration and beyond, talk at *American Astronomical Society, DPS meeting*, Pasadena.

15 **M. Brož**, D. Vokrouhlick; 2008(Apr), Asteroid clusters in major mean motion resonances with Jupiter, talk at *American Astronomical Society, DDA meeting*, Boulder.

16 **M. Brož**, D. Vokrouhlick; 2008(Oct), Resonant asteroid families — a wealthy source of information on planetary migration, talk at *American Astronomical Society, DPS meeting*, Ithaca.

Popular articles and books

1 **M. Brož**, 2000, Yarkovského efekt a dynamika sluneční soustavy, *Astropis* 1/2000.

2 **M. Brož**, 2000, Impaktní krátery (1) — Morasko, *Povětroň* 4/2000, p. 7.[1]

3 **M. Brož**, 2000, Impaktní krátery (2) — Ries, *Povětroň* 5/2000, p. 6.

4 **M. Brož**, 2001, (253) Mathilde a (433) Eros pod lupou NEARu, *Povětroň* 2/2001, p. 3.

5 **M. Brož**, 2001, NEAR phones home (o přistání na Erosu), *Povětroň* 3/2001, p. 4.

6 **M. Brož**, 2001, Asteroidy na začátku 3. tisíciletí (1), *Povětroň* 5/2001, p. 4.

7 **M. Brož**, 2002, 10 otázek a odpovědí (2), *Povětroň* 1/2002, p. 22.

8 **M. Brož**, P. Scheirich, 2002, Asteroidy na počátku 3. tisíciletí (2), *Povětroň* 2/2002, p. 8.

9 J. Ďurech, **M. Brož**, 2002, Určení průměrů planet prostým okem?!, *Povětroň* 3/2002, p. 6.

10 **M. Brož**, 2002, 10 otázek a odpovědí (3), *Povětroň* 4/2002, p. 4.

11 **M. Brož**, 2002, Technické řešení dalekohledu JST, *Povětroň* 5/2002, p. 8.

12 **M. Brož**, M. Lehký, 2002, Pozorovací program JST, *Povětroň* 5/2002, p. 7.

13 **M. Brož**, 2003, Meteority v Museum für Naturkunde, Berlin, *Povětroň* 1/2003, p. 7.

14 **M. Brož**, 2003, 10 otázek a odpovědí (4), *Povětroň* 3/2003, p. 14.

15 **M. Brož**, 2003, Impaktní kráter Steinheim, *Povětroň* S1/2003, p. 3.

16 **M. Brož**, 2004, Dynamická astronomie v roce 2004, *Povětroň* 3/2004, p 4.

17 **M. Brož**, 2004, Astronomický kurz (1) — Protoplanetární disk, *Povětroň* 4/2004, p. 4.

18 **M. Brož**, 2004, Film Sluneční soustava 2003, *Povětroň* 4/2004, p. 16.[2]

19 **M. Brož**, 2004, Astronomický kurz (2) — Vznik planet, *Povětroň* 5/2004, p. 12.

20 **M. Brož**, M. Nosek, J. Trebichavský, D. Pecinová (Eds.), 2004, Sluneční hodiny na pevných stanovištích. Čechy, Morava Slezsko a Slovensko, Academia, Prague (403pp).[3]

21 **M. Brož**, M. Cholasta, J. Kujal, R. Lacko, 2005, Planetární stezka, *Povětroň* S2/2004.[4]

22 **M. Brož**, 2005, Co na planetární stezce nenajdete?, *Povětroň* 3/2005, p. 4.

23 **M. Brož**, M. Šolc, J. Kándl, 2006, Gnómonická rekonstrukce slunečních hodin na Révovém nádvoří Klementina, *Povětroň* 2/2006, p. 4.

[1] `http://www.astrohk.cz/ashk/povetron/`
[2] `http://www.astrohk.cz/ss2003/`
[3] `http://www.astrohk.cz/slunecni_hodiny.html`
[4] `http://www.astrohk.cz/planetarni_stezka/`

24 **M. Brož**, 2006, Astronomický kurz (3) — Planetesimály a embrya, *Povětroň* 2/2006, p. 14.
25 **M. Brož**, K. Zubatý, J. Svoboda, 2006, Model Valles Marineris, *Povětroň* 3/2006, p. 4.
26 **M. Brož**, 2006, Slunenční hodiny (14) — Konstrukce analematických hodin, *Povětroň* 5/2006, p. 4.
27 **M. Brož**, K. Zubatý, J. Svoboda, 2006, Energetika kráteru Tycho, *Povětroň* S1/2006, p. 33.
28 **M. Brož**, 2007, Astronomický kurz (4) — Soustavy souřadnic, *Povětroň* 2/2007, p. 4.
29 **M. Brož**, 2007, Astronomický kurz (5) — Otočná mapa oblohy, *Povětroň* 3/2007, p. 4.
30 **M. Brož**, V. Samohrdová, J. Pospíšil, 2007, Válcové výškové hodiny na Malém náměstí, *Povětroň* 5/2007, p. 18.
31 **M. Brož**, K. Zubatý, V. Plašil, J. Zima, M. Cholasta, M. Brožová, 2007, Galaktická stezka, *Povětroň* S1/2007.[5]
32 **M. Brož**, 2008, Astronomický kurz (6) — Měsíce a slapy, *Povětroň* 2/2008, p. 4.
33 **M. Brož**, 2008, Teorie signálu a šumu, *Povětroň* S1/2008, p. 4.
34 **M. Brož**, 2008, Astronomický kurz (6) — Problém dvou těles, *Povětroň* 4/2008, p. 4.
35 **M. Brož**, 2008, Astronomický kurz (7) — Problém tří těles, *Povětroň* 5/2008, p. 4.
36 **M. Brož**, 2008, Astronomický kurz (8) — Negravitační zrychlení, *Povětroň* 6/2008, p. 14.

[5] `http://www.astrohk.cz/galakticka_stezka/`