



David Einšpigel

Curriculum Vitæ

Work experience

- MAY2014 – **Junior scientist of the Swarm+Oceans project**, *Charles University, Prague.*
APR2016 Modelling of ocean tides and ocean-induced magnetic signals, funded by the European Space Agency, <http://geo.mff.cuni.cz/SwarmOceans/>
since **Pre-doctoral research scholar**, *Geophysics Section, School of Cosmic Physics, Dublin Institute for Advanced Studies, Dublin.*
MAR2014
JUL2011 – **Summer intern**, *Institute of Rock Structure and Mechanics, The Academy of Science of the Czech Republic, Prague.*
SEP2011
Microseismic signal processing and modelling

Education

- OCT2012 – **Doctoral study of geophysics**, *Faculty of Mathematics and Physics, Charles University, Prague.*
MAY2017
OCT2010 – **Master study of geophysics**, *Faculty of Mathematics and Physics, Charles University, Prague.*
MAY2012
OCT2007 – **Bachelor study of general physics**, *Faculty of Mathematics and Physics, Charles University, Prague.*
JUN2010

Languages

- English Professional working proficiency
Czech Mother tongue
German Elementary

Computer skills

- Advanced Modern Fortran 90+ with OpenMP/MPI, L^AT_EX, gnuplot
Intermediate Linux/UNIX, Microsoft Windows, OpenOffice/Microsoft Office, Inkscape
Basic HTML, Matlab

Awards

- 2011 Merit scholarship

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Reviewed scientific papers

- 2017 **Diurnal atmosphere-ocean signals in Earth's rotation rate and a possible modulation through ENSO**, *Geophys. Res. Lett.*, 44(6):2755–2762, DOI: 10.1002/2017GL072633.
Schindelegger, M., Salstein, D., Einšpigel, D. & Mayerhofer, C.
- 2017 **Time-domain modeling of global ocean tides generated by the full lunisolar potential**, *Ocean Dynamics*, 67(2):165–189, DOI: 10.1007/s10236-016-1016-1.
Einšpigel, D. & Martinec, Z.
- 2016 **The Global S_1 Tide in Earth's Nutation**, *Surv. Geophys.*, 37(3):643–680, DOI: 10.1007/s10712-016-9365-3.
Schindelegger, M., Einšpigel, D., Salstein, D. & Böhm, J.
- 2015 **A new derivation of the shallow water equations in geographical coordinates and their application to the global barotropic ocean model (the DEBOT model)**, *Ocean Modelling*, 92:85–100, DOI: 10.13168/AGG.2013.0062.
Einšpigel, D. & Martinec, Z.
- 2014 **The differences in the detectability of perforation shots and microseismic events in the surface monitoring: the attenuation effect**, *Acta Geodyn. Geomater.*, 11(2):159–164, DOI: 10.13168/AGG.2013.0062.
Einšpigel, D. & Eisner, L.

Theses

- Doctoral thesis **Time-domain modelling of global barotropic ocean tides**, defended 4.5.2017, supervisor: prof. Zdeněk Martinec, PDF version: <http://geo.mff.cuni.cz/theses/2017-Einspigel-PhD.pdf>
- Master thesis **Barotropic ocean tide model**, defended 17.5.2012, supervisor: prof. Zdeněk Martinec, PDF version: <http://geo.mff.cuni.cz/theses/2012-Einspigel-Mgr.pdf>
- Bachelor thesis **Icy satellites of giant planets**, defended 22.6.2010, supervisor: prof. Ondřej Čadek, PDF version: <http://geo.mff.cuni.cz/theses/2010-Einspigel-Bc.pdf> (in Czech)

Interests

- Fitness kickboxing
- Poker Texas hold'em
- City traveling
- Films and film studies
- Alpine skiing