

TEREZA KREJČOVÁ

CURRICULUM VITAE

JULY 2013

ADDRESS

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PERSONAL

Date of birth: May 3, 1984
Citizenship: Czech

EDUCATION

- 2013 Ph.D., Astrophysics, Masaryk University, Brno, Czech Republic
Thesis title: “Transiting extrasolar planets and star-planet interaction”
Advisor: Ján Budaj (Astronomical Institute, Tatranská Lomnica, Slovakia)
- 2008 M.S., Astrophysics, Masaryk University, Brno, Czech Republic
- 2006 B.S., Applied physics—Astrophysics, Masaryk University, Brno, Czech Republic

WORK EXPERIENCE

2009 – now Research Assistant; Masaryk University, Czech Republic

TEACHING EXPERIENCE

- 2008 – 2010 Teaching Assistant; Masaryk University, Czech Republic
Undergraduate courses: Elementary Astronomy 1 & 2
- 2009 – 2010 Co-mentor of the undergraduate student Šárka Dyčková
(Topic of her bachelor thesis: “Characterisation of exoplanets via transiting method”)

OBSERVING EXPERIENCE

ESO La Silla	Chile (2010)	MPG/ESO 2.2m, FEROS: Echelle Spectroscopy; Principal investigator; 5.5 consecutive nights
Stará Lesná Observatory	Slovakia	50cm, CCD photometry (5 nights)
Masaryk University Observatory	Czech Rep.	62cm, CCD photometry (30 nights)
Mt. Suhora Observatory	Poland	60cm, CCD photometry (10 nights)

RESEARCH INTERESTS

- Photometric study of transiting extrasolar planets – determination of orbital and physical parameters
- Search for the possible effects of mutual influence between host star and close-in exoplanet
- Modelling the out-of-transit exoplanetary Kepler light curves with SHELLSPEC code – analysis of planet albedo and heat redistribution over the planet

PUBLIC OUTREACH

September 2011 Invited talk: “Exotic exoplanets – can we find another Earth?” at the cultural festival “Bezručova Opava”, Opava, Czech Republic

CONFERENCES AND WORKSHOPS

- 2012 Sagan Exoplanet Summer Workshop: working with exoplanet light curves, Pasadena, USA (presentation of a poster)
- 2011 Conference: From interacting binaries to exoplanets: essential modeling tools, Tatranská Lomnica, Slovakia (presentation of a poster)
- 2009 Conference: Binaries: Key to comprehension of the universe, Brno, Czech Republic (presentation of a poster)
- 2010 Invited talk: “Extrasolar planetary system WASP-10” at the 42nd Conference on Variable Stars Research, Prague, Czech Republic

SUMMER SCHOOLS ATTENDED

- 2011 6th Heidelberg summer school, Germany (Topic: Characterizing exoplanets - from formation to atmospheres)
- 2009 ASTROCAM school, Spain (Topic: Young Stellar Objects: from cool stars to exoplanets)
- 2007 11th Vatican observatory summer school, Italy (Topic: Extrasolar planets and brown dwarfs)
- 2007 SIWA – Split international winter school of Astrophysics, Croatia (Topic: Extrasolar planets and astrobiology)

OTHER EXPERIENCE

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| Languages | English (fluent); German (good); Russian (basic); Czech (mother) |
| Computer skills | Fortran; Linux; IRAF; Octave; Gnuplot |
| March – August 2010 | Studenthip at Slovak Astronomical Institute in Tatranská Lomnica, Slovakia |
| 2010 – now | Member of Czech Astronomical Society |

REFERENCES

1. Dr. Ján Budaj (PhD Advisor)
Astronomical Institute, Slovak Academy of Sciences
059 60 Tatranská Lomnica, Slovakia
E-mail: budaj@ta3.sk
2. Prof. Jiří Krtička
Dpt. of Theoretical Physics and Astrophysics, Faculty of Science, Masaryk University
Kotlářská 2, 61137 Brno, Czech Republic
E-mail: krticka@physics.muni.cz

LIST OF PUBLICATIONS

PAPERS

1. **Krejčová, T.**, Budaj, J. 2012, *Evidence for enhanced chromospheric Ca II H and K emission in stars with close-in extrasolar planets*, A&A, 540, A82
2. **Krejčová, T.**, Budaj, J., Krushevska, V. 2010, *Photometric observations of transiting extrasolar planet Wasp-10 b*, CoSka, 44, 77
3. Maciejewski, G., Dimitrov, D., Neuhauser, R., Tetzlaff, N., Niedzielski, A., Raetz, St., Chen, W. P., Walter, F., Marka, C., Baar, S., **Krejčová, T.**, Budaj, J., Krushevska, V., Tachihara, K., Takahashi, H., Mugrauer, M. 2011, *Transit timing variation and activity in the Wasp-10 planetary system*, MNRAS, 411, 1204
4. Vaňko, M., Maciejewski, G., Jakubík, M., **Krejčová, T.**, Budaj, J., Pribulla, T., Ohlert, J., Raetz, St., Parimucha, Š., Bukowiecki, L. 2013, *New photometric observations of the transiting planetary system TrES-3: Long-term stability of the system*, MNRAS, 432, 944
5. In preparation: Kohout, T., Havrila, K., Tóth, J., Husárik, M., Gritsevich, M., Britt, D., Borovička, J., Spurný, P., Igaz, A., Svoreň, J., Kornoš, L., Vereš, P., Koza, J., Kučera, A., Zigo, P., Gajdoš, Š., Világi, J., Čapek, D., Křišandová, Z., Tomko, D., Šilha, J., Schunová, E., Bodnárová, M., Búzová, D., **Krejčová, T.**; *Density, porosity and magnetic susceptibility of the Košice meteorites and homogeneity of H chondrite showers*, Meteoritics & Planetary Science, 2013

CONFERENCE PROCEEDINGS

1. **Krejčová, T.**, Budaj, J., Koza, J. 2012, *Search for the Star-Planet Interaction*, IAUS, 282, 125
2. **Krejčová, T.**, Budaj, J. 2010, *Photometric Observation of Transiting Extrasolar Planet Wasp-10 b*, ASPC, 435, 447
3. Vaňko, M., Jakubík, M., **Krejčová, T.**, Maciejewski, G., Budaj, J., Pribulla, T., Ohlert, J., Raetz, S., Krushevska, V., Dubovský, P. 2012, *New Photometric Observations of the Transiting Extrasolar Planet TrES-3 b*, IAUS, 282, 135
4. Toth, J., Porubčan, V., Borovička, J., Igaz, A., Spurný, P., Svoreň, J., Husárik, M., Kornoš, L., Vereš, P., Zigo, P., Koza, J., Kučera, A., Gajdoš, S., Világi, J., Čapek, D., Šilha, J., Schunová, E., Křišandová, Z., Tomko, D., Bodnárová, M., Búzová, D., **Krejčová, T.** 2012, *Košice meteorite – recovery and the strew field*, European Planetary Science Congress 2012, EPSC2012-708
5. **Krejčová, T.**, Budaj, J., Krushevska, V. 2011, *Extrasolar planetary system WASP-10*, 42nd Conference on Variable Stars Research, OEJV, 139, 10-12
6. **Krejčová, T.** 2009, *Photometry of extrasolar planets*, 40th Conference on Variable Stars Research, OEJV, 109, 28