

SÁNDOR BEREGI

Updated: September 2018

PhD candidate

Department of Applied Mechanics,
Budapest University of Technology and Economics,
ADDRESS 1111 Budapest, Műegyetem rakpart 3., Hungary
E-MAIL beregi@mm.bme.hu **TEL.** +36 1 463 1235

RESEARCH INTERESTS Tyre and vehicle dynamics, nonlinear dynamics, time-delay, non-smooth systems

EMPLOYMENT

- 2018- Assistant research fellow, MTA-BME Research Group on Dynamics of Machines and Vehicles, Hungarian Academy of Sciences
- 2018- Engineer, Department of Applied Mechanics, Budapest University of Technology and Economics

EDUCATION

- 2015- PhD in Mechanical Engineering - Budapest University of Technology and Economics, Faculty of Mechanical Engineering
Department of Applied Mechanics, Budapest (Hungary)
- 2013-2015 Mechanical Engineer (MSc)
Budapest University of Technology and Economics,
Faculty of Mechanical Engineering, Budapest (Hungary)
- 2014 University of Bristol, Department of Engineering Mathematics
(Erasmus+, MSc final project), Bristol (United Kingdom)
- 2009-2013 Mechanical Engineer (BSc)
Budapest University of Technology and Economics,
Faculty of Mechanical Engineering, Budapest (Hungary)

TEACHING ACTIVITY

- 2015- Tutorials in Mechanics (Statics, Strength of Materials, Dynamics, Vibrations, Analytical Mechanics, Dynamics of Rolling – Stability and Autonomous Driving)
Budapest University of Technology and Economics, Department of Applied Mechanics

- AWARDS** Young Scientist Award of the 9th European Nonlinear Dynamics Conference (ENOC), Budapest (2017)
- Excellent Tutor of the Faculty of Mechanical Engineering, Budapest University of Technology and Economics (2017)
- Thesis award of the Hungarian Chamber of Engineers,
Department of Mechanical Engineering (2015)

SELECTED PUBLICATIONS

- S. Beregi, D. Takács, Analysis of the tyre-road interaction with a non-smooth delayed contact model, *Multibody System Dynamics*, 2018., <https://doi.org/10.1007/s11044-018-09636-2>
- S. Beregi, D. Takács, C. Hős, Nonlinear analysis of a shimmying wheel with contact-force characteristics featuring higher order discontinuities, *Nonlinear Dynamics*, Vol. 90, Issue 2, pp. 877-888., 2017.
- S. Beregi, D. Takács, D. A.W. Barton, Hysteresis effect in the nonlinear stability of towed vehicles, *ASME IDETC/CIE 2017*, Cleveland, Ohio, USA, 2017.
- S. Beregi., D. Takács, G. Stépán, Tyre induced vibrations of the car-trailer system, *Journal of Sound and Vibration*, Vol., pp. 214-227, 2016.