

# Josip Tambača

Professor, Department of Mathematics,  
University of Zagreb  
PhD University of Zagreb

Research interest: Continuum mechanics, Partial differential equations

Recent publications:

- [1] J. Tambača, *A new linear shell model for shells with little regularity*, **Journal of Elasticity** **117** (2014), 2, 163-188.
- [2] M. Bukač, S. Čanić, R. Glowinski, J. Tambača, A. Quaini, *Fluid-structure interaction in blood flow capturing non-zero longitudinal structure displacement*, **J. Comput. Phys.** **235** (2013), 515-541.
- [3] M. Marohnić, J. Tambača, *Derivation of the linear elastic string model from three-dimensional elasticity*, **Journal of Elasticity** **111** (2013), 41-65.
- [4] S. Čanić, J. Tambača, *Cardiovascular Stents as PDE Nets: 1D vs. 3D*, **IMA Journal of Applied Mathematics** **77** (2012), 6, 748-779.
- [5] J. Tambača, I. Velčić, *Derivation of the nonlinear bending-torsion model for a junction of elastic rods*, **Proceedings of the Royal Society of Edinburgh, Section: A Mathematics** **142** (2012), 633-664.

Selected publications:

- [1] J. Tambača, M. Kosor, S. Čanić, D. Paniagua, *Mathematical modeling of vascular stents*, **SIAM Journal on Applied Mathematics** **70** (2010), 1922-1952.
- [2] I. Aganović, J. Tambača, Z. Tutek, *Derivation and justification of the models of rods and plates from linearized three-dimensional micropolar elasticity*, **Journal of Elasticity** **84** (2006), 131-152.
- [3] S. Čanić, A. Mikelić, D. Lamponi and J. Tambača, *Self-Consistent Effective Equations Modeling Blood Flow in Medium-to-Large Compliant Arteries*, **Multiscale Modeling and Simulation** **3** (2005), 559-596.
- [4] M. Jurak, J. Tambača, *Linear curved rod model, General curve*, **Mathematical Models and Methods in Applied Sciences**, **Vol. 11, No. 7**, 2001, 1237-1252.
- [5] M. Jurak, J. Tambača, *Derivation and justification of a curved rod model*, **Mathematical Models and Methods in Applied Sciences** **Vol. 9, No. 7** (1999) 991-1014.