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PhD University of Zagreb, 2010

Research interest: Analysis of Partial Differential Equations; Free and Moving Boundary Problems; Fluid-Structure Interaction Problems; Navier-Stokes Equations

Recent publications:

- [1] B. Muha, *A note on optimal regularity and regularizing effects of point mass coupling for a heat-wave system*, **Journal of Mathematical Analysis and Applications**, Vol. **425** (2), 1134–1147, 2015.
- [2] M. Bukac, S. Canic, B. Muha, *A partitioned scheme for fluid-composite structure interaction problems*, **Journal of Computational Physics**, Vol. **281**, 493-517, 2015.
- [3] B. Muha, *A note on the Trace Theorem for domains which are locally subgraph of H^1 older continuous function*, **Networks and Heterogeneous Media**, Vol. **9** (1), 191-196, 2014.
- [4] M. Bukac, S. Canic, R. Glowinski, B. Muha, A. Quaini, *A Modular, Operator Splitting Scheme for Fluid-Structure Interaction Problems with Thick Structures*, **International Journal for Numerical Methods in Fluids**, Vol. **74** (8), 577-604, 2014.
- [5] B. Muha, S. Canic, *Existence of a solution to a fluid-multi-layered-structure interaction problem*, **Journal of Differential Equations**, Vol. **256** (2), 658-706, 2014.

Selected publications:

- [1] B. Muha, S. Canic, *Existence of a weak solution to a nonlinear fluid-structure interaction problem modeling the flow of an incompressible, viscous fluid in a cylinder with deformable walls*, **Archives for Rational Mechanics and Analysis**, Vol. **207** (3), 919-968, 2013
- [2] B. Muha, S. Canic, *Existence of a solution to a fluid-multi-layered-structure interaction problem*, **Journal of Differential Equations**, Vol. **256** (2), 658-706, 2014
- [3] B. Muha, *A note on optimal regularity and regularizing effects of point mass coupling for a heat-wave system*, **Journal of Mathematical Analysis and Applications**, Vol. **425** (2), 1134–1147, 2015.
- [4] M. Bukac, S. Canic, B. Muha, *A partitioned scheme for fluid-composite structure interaction problems*, **Journal of Computational Physics**, Vol. **281**, 493-517, 2015.10.
- [5] B. Muha, Z. Tutek, *Note on evolutionary free piston problem for Stokes equations with slip boundary conditions*, **Communications on Pure and Applied Analysis**, Vol. **13** (4), 1629-1639, 2014