

Igor Pažanin

Associate Professor, Department of Mathematics,
Faculty of Science, University of Zagreb
PhD University of Zagreb, 2008.

Research interest: Mathematical modelling in fluid mechanics; Asymptotic analysis of PDEs stated in thin domains; Analysis of nonlinear PDEs.

Recent publications:

- [1] I.Pažanin, F.J.Suarez-Grau, *Analysis of the thin film flow in a rough domain filled with micropolar fluid*, **Comput. Math. Appl.** **68** (2014), 1915 – 1932.
- [2] I.Pažanin, *On the helical pipe flow with a pressure-dependent viscosity*, **Theor. Appl. Mech. Lett.** **4** (2014), 062006, 8 pages.
- [3] E.Marušić-Paloka, I.Pažanin, *A note on the pipe flow with a pressure-dependent viscosity*, **J. Non-Newtonian Fluid Mech.** **197** (2013), 5 – 10.
- [4] I.Pažanin, F.J.Suarez-Grau, *Effects of rough boundary on the heat transfer in a thin film flow*, **C. R. Mecanique** **341** (2013), 646 – 652.
- [5] I.Pažanin, *Investigation of micropolar fluid flow in a helical pipe via asymptotic analysis*, **Commun. Nonlinear Sci. Numer. Simul.** **18** (2013), 528 – 540.

Selected publications:

- [1] E.Marušić-Paloka, I.Pažanin, S.Marušić, *Comparison between Darcy and Brinkman laws in a fracture*, **Appl. Math. Comput.** **218** (2012), 7538 – 7545.
- [2] I.Pažanin, *Asymptotic behavior of micropolar fluid flow through a curved pipe*, **Acta Appl. Math.** **116** (2011), 1 – 25.
- [3] E.Marušić-Paloka , I.Pažanin, *On a reactive solute transport through a curved pipe*, **Appl. Math. Lett.** **24** (2011), 878 – 882.
- [4] E.Marušić-Paloka, I.Pažanin, *Non-isothermal fluid flow through a thin pipe with cooling* , **Appl. Anal.** **88** (2009), 495 – 515.
- [5] E.Marušić-Paloka, I.Pažanin, *Fluid flow through a helical pipe*, **Z. Angew. Math. Phys.** **58** (2007), 81 – 99.