

Publications related to the thesis

Papers in journals with impact factor (according to Web of Science)

- Škardová, K., Oberhuber, T., Tintěra, J., and Chabiniok, R. (2021). *Signed-distance function based non-rigid registration of image series with varying image intensity*. *Discrete & Continuous Dynamical Systems - S*, 14(3):1145–1160.
 - 5-Year Journal Impact Factor 1.958
 - 2021 Journal Impact Factor 1.838
- Castellanos, D. A., Škardová, K., Bhattaru, A., Berberoglu, E., Greil, G., Tandon, A., Dillenbeck, J., Burkhardt, B., Hussain, T., Genet, M., and Chabiniok, R. (2021). *Left ventricular torsion obtained using equilibrated warping in patients with repaired tetralogy of Fallot*. *Pediatric Cardiology*, 42(6):1275–1283.
 - 5-Year Journal Impact Factor 1.622
 - 2021 Journal Impact Factor 1.865

Conference papers

- Škardová, K., Rambausek, M., Chabiniok, R., and Genet, M. (2019). *Mechanical and imaging models-based image registration*. In *ECCOMAS Thematic Conference on Computational Vision and Medical Image Processing*, pages 77–85. Springer.

Book chapters

- Chabiniok, R., Škardová, K., Galabov, R., Eichler, P., Gusseva, M., Janoušek, J., Fučík, R., Tintěra, J., Oberhuber, T., Hussain, T. (2021). *Translational Cardiovascular Modeling: Tetralogy of Fallot and Modeling of Diseases*. In *Modeling Biomaterials* (pp. 241–276). Birkhäuser, Cham.

Submitted

- Škardová, K., Galabov, R., Fricková, K., Pevný T., Tintěra, J., Oberhuber, T., Chabiniok, R., (2022). *Combining machine learning and mathematical modeling in estimation of T1 relaxation time from cardiac magnetic resonance imaging data*. Under review in *Heliyon*.

Other publications

Conference papers

- Škardová, K., Eichler, P., Oberhuber, O., and Fučík, R. (2020). *Investigation of Blood-Like Non-Newtonian Fluid Flow in Stenotic Arteries using the Lattice Boltzmann Method in 2D*. *ALGORITMY 2020: 21st Conference on Scientific Computing*

Submitted

- Eichler, P., Galabov, R., Fučík, R., **Škardová, K.**, Oberhuber, T., Pauš, P., Tintěra, J., and Chabiniok, R. (2022). *Non-newtonian turbulent flow through aortic phantom: Experimental and computational study using magnetic resonance imaging and lattice Boltzmann method.* Under review in Computers & Mathematics with Applications.
- Fučík, R., Kovář, J., **Škardová, K.**, Polívka, O., and Chabiniok, R. (2022). *A lattice Boltzmann approach to mathematical modeling of myocardial perfusion.* Under review in International Journal for Numerical Methods in Biomedical Engineering.