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Research interest: numerical solution of singularly perturbed ODE's, mathematical modeling in biology and medicine

## Recent publications:

- [1] I. Beroš, M. Marušić, Solving Parabolic Singularly Perturbed Problems by Collocation Using Tension Splines, Proceedings of Second Conference on Applied Mathematics and Scientific Computing, Brijuni, Croatia, 2003 (eds. M. Marušić et.al.) Springer-Verlag, (2005).
- [2] J. Lajtner, A. Lucić, M. Marušić, R. Erben, "The effects of the trematode *Bucephalus polymorphus* on the reproductive cycle of the zebra mussel *Dreissena polymorpha* in the Drava River", Acta Parasitologica, 53 (2008) 85—92.
- [3] M. Marušić, D. Marković, D. Jukić, "Least squares fitting the three-parameter inverse Weibull density", Mathematical Communications, 15 (2010) 539—553.
- [4] I. Čuković-Bagić, J. Dumančić, E. Nuzzolese, M. Marušić, M.M. Lepore, "Oral Health Awareness in Croatian and Italian Urban Adolescents", Coll. Antropol., 36 (2012) 221—226.
- [5] M. Marušić, "On e-uniform convergence of exponentially fitted methods", Mathematical Communications, 19 (2014) 545—559.

## Selected publications:

- [1] M. Marušić, Ž. Bajzer, "Generalized Two-Parameter Equation of Growth", Journal of Mathematical Analysis and Applications, 179 (1993) 446-462.
- [2] M. Marušić, Ž. Bajzer, J.P. Freyer, S. Vuk-Pavlović, "Analysis of Growth of Multicellular Tumor Spheroids by Mathematical Models", Cell Proliferations, 27 (1994) 73-94.
- [3] M. Marušić, Ž. Bajzer, S. Vuk-Pavlović, J.P. Freyer, "Tumor Growth *in vivo* and as Multicellular Spheroids Compared by Mathematical Models", Bulletin of Mathematical Biology, 56 (1994) 617-631.
- [4] M. Marušić, M. Rogina, "Sharp Error Bounds for Interpolating Splines in Tension", J. Comput. Appl. Math., 61 (1995) 205-223.
- [5] M. Marušić, "A Fourth/Second Order Accurate Collocation Method for Singularly Perturbed Two-Point Boundary Value Problems Using Tension Splines", Numerische Mathematik, 88 (2001) 135—158.