

Publications of Piotr Rybka

1. Karolina Kielak, Piotr B. Mucha, Piotr Rybka, *Almost classical solutions to the total variation flow*, preprint.
2. M. Korzec, P. Rybka, *On a higher order convective Cahn-Hilliard type equation*, preprint.
3. P. Rybka, D. Socha *Existence of the global solutions of an integro-differential equation in population dynamics*, preprint.
4. M. Korzec, P. Nayar, P. Rybka, *Global weak solutions to a sixth order Cahn-Hilliard type equation*, preprint.
5. Y. Giga, P.Górka, P.Rybka, *A Comparison Principle for Hamilton-Jacobi equations with discontinuous Hamiltonians*, Proc. AMS. **139**, (2011), 1777-1785.
6. W. Merz, P.Rybka, *Strong Solution to the Richards Equation in the Unsaturated Zone*, J. Math. Anal. Appl., **371**, (2010), 741-749.
7. P.Górka, P.Rybka, *Existence and uniqueness of solutions to singular ODE's*, Arch. Math., **94**, (2010), 227-233.
8. Y. Giga, P.Górka, P.Rybka, *Nonlocal spatially inhomogeneous Hamilton-Jacobi equation with unusual free boundary*, Discrete Contin. Dyn. Syst., **26**, (2010), 493-519.
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19. Y. Giga, P. Rybka, *Stability of facets of self-similar motion of a crystal*, *Advances in Differential Equation*, **10**, Number 6, (2005), 601-634.
20. P. Rybka, M. Luskin, *Existence of Energy Minimizers for Magnetostrictive Materials*, *SIAM J. Math. Anal.* **36**, No. 6, (2005) pp. 2004–2019.
21. Y. Giga, P. Rybka, *Existence of self-similar evolution of crystals grown from supersaturated vapor*, *Interfaces Free Bound.* **6** (2004), 405-421.
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1. Piotr B. Mucha, Piotr Rybka, *Almost classical solutions of static Stefan type problems involving crystalline curvature*, in: "Nonlocal and Abstract Parabolic Equations and their Applications", Eds: Piotr Mucha, Marek Niezgodka and Piotr Rybka, Banach Center Publ. **86**, IMPAN, Warszawa, 2009, 223-234.
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"Nonlocal and Abstract Parabolic Equations and their Applications", Eds: Piotr Mucha, Marek Niezgodka and Piotr Rybka, Banach Center Publ. **86**, IMPAN, Warszawa, 2009

Textbooks

"Hiperbolic problems", in: "A problem book on PDE's"(in Polish), the Faculty of Mathematics, Informatics and Mechanics of the University of Warsaw, 2010, ed. P.Strzelecki. P.Rybka co-ordinator of the project.