

## List of Publications to Evolution Equations

### Reviewed Publications in Mathematical Journals

1. Ein abstraktes nichtlineares Cauchy-Kowalewskaja-Theorem mit singulären Koeffizienten I, ZAA, 6 (1) 1987, 35-41.
2. Ein abstraktes nichtlineares Cauchy-Kowalewskaja-Theorem mit singulären Koeffizienten II, ZAA, 7 (2) 1988, 171-183.
3. About the theorem of Holmgren for abstract Cauchy-Kovalevsky problems, Complex Variables, 14 (1990), 197-205.
4. An abstract Cauchy-Kovalevsky problem of higher order, Math. Nachr. 150 (1991), 25-39.
5. Existence and uniqueness of global solutions of regular characteristic Cauchy problems, Math. Nachr. 161 (1993), 75-93.
6. Leray-Volevich conditions for systems of abstract evolution equations of Nirenberg/Nishida type, Tsukuba Journal of Mathematics 18 (1994) 1, 193-202.
7. A generalized theorem of Peano in scales of Banach spaces with completely continuous imbedding, Funkcialaj Ekvacioj 37 (1994) 3, 521-530.
8. Yagdjian/Reissig, Levi conditions and global Gevrey regularity for the solutions of quasilinear weakly hyperbolic equations, Math. Nachr. 178 (1996) 285-307.
9. Yagdjian/Reissig, On the Cauchy problem for quasilinear weakly hyperbolic equations with time degeneration, Journal of Contemporary Mathematical Analysis 28 (1993) 2, 31-50.
10. Yagdjian/Reissig, On the stability of global existence of solutions to weakly hyperbolic equations, Chinese Annals of Mathematics, Ser. B, 18 (1997) 1, 1-14.
11. Dreher/Reissig, About the  $C^\infty$ -well posedness of fully nonlinear weakly hyperbolic equations of second order with spatial degeneracy, Advances in Differential Equations 2 (1997) 6, 1029-1058.

12. Weakly hyperbolic equations with time degeneracy in Sobolev spaces, *Abstract and Applied Analysis* 2 (1997) 3-4, 239-256.
13. Dreher/Reissig, Local solutions of fully nonlinear weakly hyperbolic differential equations in Sobolev spaces, *Hokkaido Mathematical Journal* 27 (1998) 2, 337-381.
14. D'Ancona/Reissig, New trends in the theory of weakly hyperbolic equations, *Journal of Nonlinear Analysis* 30 (1997) 4, 2507-2515 (Proceedings of the Second World Congress of Nonlinear Analysts).
15. Yagdjian/Reissig, Weakly hyperbolic equations with fast oscillating coefficients, *Osaka Journal of Mathematics* 36 (1999) 2, 437-464.
16. Dreher/Reissig, Propagation of mild singularities for semilinear weakly hyperbolic equations, *Journal d'Analyse Mathématique* 82 (2000), 233-266.
17. Kubo/Reissig,  $C^\infty$ -well posedness of the Cauchy problem for quasilinear hyperbolic equations with coefficients non-Lipschitz in time and smooth in space, *Banach Center Publications*, vol.60 (2003), 131-150.
18. Bourdaud/Sickel/Reissig, Hyperbolic equations, function spaces with exponential weights and Nemytskij operators, *Annali di Matematica Pura ed Applicata* 182 (2003) 409-455.
19. Cicognani/Del Santo/Reissig, A dyadic decomposition approach to a finitely degenerate hyperbolic problem, *Annali dell' Università di Ferrara* 52 (2006), 281-290.
20. Matsuyama/Reissig, Stabilization and  $L^p-L^q$  decay estimates, *Asymptotic Analysis* 50 (2006) 239-268.
21. Cicognani/Hirosawa/Reissig, The Log-effect for p-evolution type models, *Journal Mat. Soc. Japan* 60 (2008) 3, 819-863.
22. Cicognani/Hirosawa/Reissig, Loss of regularity for p-evolution type models, *J. Math. Anal. Appl.* 347 (2008), 35-58.
23. Lu/Reissig, Does the loss of regularity really appear?, *Mathematical Methods in the Applied Sciences* 32 (2009) 1246-1268.
24. Fang/Lu/Reissig,  $\nu$ -Loss of derivatives for an evolution type model, *Nonlinear Analysis* 71 (2009), 5368-5380.

25. Cicognani/Reissig, On Schrödinger type evolution equations with non-Lipschitz coefficients, *Annali di Matematica Pura ed Applicata* 190 (2011) 4, 645-665.
26. Cicognani/Reissig, Well-posedness for degenerate Schrödinger equations, *Evolution Equations and Control Theory* 3 (2014) 1, 15-33.
27. Cicognani/Reissig, Necessity of Gevrey-type Levi conditions for degenerate Schrödinger equations, *Journal of Abstract Differential Equations and Applications* 5 (2014) 1, 52-70.
28. Kainane/Reissig, Qualitative properties of solution to structurally damped  $\sigma$ -evolution models with time increasing coefficient in the dissipation, *Advances in Differential Equations* 20 (2015) 5-6, 433-462.
29. Pham/Kainane/Reissig, Global existence for semi-linear structurally damped  $\sigma$ -evolution models, *J. Math. Anal. Appl.* 431 (2015), 569-596.
30. Kainane/Reissig, Qualitative properties of solutions to structurally damped  $\sigma$ -evolution models with time decreasing coefficient in the dissipation, in *Complex Analysis and Dynamical Systems VI, Contemporary Mathematics*, vol. 653, Amer. Math. Soc., Providence, RI, 2015, 191-217.
31. Cicognani/Reissig, Some remarks on Gevrey well-posedness for degenerate Schrödinger equations, in *Complex Analysis and Dynamical Systems VI, Contemporary Mathematics*, vol. 653, Amer. Math. Soc., Providence, RI, 2015, 81-91.
32. Reich/Sickel/Reissig, Non-analytic superposition results on modulation spaces with subexponential weights, *Journal of Pseudo-Differential Operators and Applications* 7 (2016) 3, 365-409.

### **Reviewed publications in books of collected papers**

1. An abstract Cauchy-Kovalevsky theorem in scales of locally convex spaces, *Pitman Research Notes in Mathematics Series*, vol. 256, Longman, 1991, 114-120.
2. Theorems of Cauchy-Kovalevsky and Holmgren type for abstract evolution equations in scales of locally convex spaces, in *Mshimba/Tutschke*.

Functionalanalytic methods in complex analysis and applications to partial differential equations, 198-208. World Scientific, Singapore, 1995.

3. Dreher/Reissig, Weakly hyperbolic equations - a modern field in the theory of hyperbolic equations, Eds. H.Begehr et al., Partial Differential and Integral Equations, 303-318, Kluwer (1999).
4. A refined diagonalization procedure to handle fast oscillations in degenerate hyperbolic problems, Eds. F.Colombini and T.Nishitani, Hyperbolic problems and related topics, International Press, Somerville (2003), 295-318.
5. Lu/Reissig, Instability behavior and loss of regularity, Eds. A.Bove, D.Del Santo, V.Murthy, Advances in phase space analysis of partial differential equations, Birkhäuser, 2009, 171-200.
6. Herrmann/Reissig, P-evolution operators with characteristics of variable multiplicity, Eds. M. Ruzhansky and J. Wirth, Progress in Analysis and its applications, Proceedings of the 7th ISAAC congress, World Scientific, 2010, 339-345.
7. Herrmann/Yagdjian/Reissig,  $H^\infty$  well-posedness for degenerate  $p$ -evolution models of higher order with time-dependent coefficients, in: Eds. M. Reissig, M. Ruzhansky, Progress in Partial Differential Equations, Asymptotic profiles, regularity and well-posedness, Springer Proceedings in Mathematics & Statistics, vol. 44, Springer 2013, 125-151.
8. Pham Trieu Duong/Reissig, The external damping Cauchy problems with general powers of the Laplacian, in: Eds. Pei Dang, Min Ku, Tao Qian and L. Rodino, New Trends in Analysis and Interdisciplinary Applications, Trends in Mathematics, Research Perspectives, Birkhäuser, Cham, 2017.