List of Publications

Refereed research articles

1. F. Genoud, C.A. Stuart, Schrödinger equations with a spatially decaying nonlinearity: existence and stability of standing waves, *Discrete Contin. Dyn. Syst.* **21** (2008), 137–186.

2. F. Genoud, Existence and orbital stability of standing waves for some nonlinear Schrödinger equations, perturbation of a model case, *J. Differential Equations* **246** (2009), 1921–1943.

3. F. Genoud, Existence and stability of high frequency standing waves for a nonlinear Schrödinger equation, *Discrete Contin. Dyn. Syst.* **25** (2009), 1229–1247.

4. F. Genoud, A smooth global branch of solutions for a semilinear elliptic equation on $\mathbb{R}^N$, *Calc. Var. Partial Differential Equations* **38** (2010), 207–232.

5. F. Genoud, Bifurcation and stability of travelling waves in self-focusing planar waveguides, *Adv. Nonlinear Stud.* **10** (2010), 357–400.

6. F. Genoud, A uniqueness result for $\Delta u - \lambda u + V(|x|)u^p = 0$ on $\mathbb{R}^2$, *Adv. Nonlinear Stud.* **11** (2011), 483–491.

7. F. Genoud, Bifurcation from infinity for an asymptotically linear problem on the half-line, *Nonlinear Anal.* **74** (2011), 4533–4543.

8. F. Genoud, B.P. Rynne, Second order, multi-point problems with variable coefficients, *Nonlinear Anal.* **74** (2011), 7269–7284.

9. F. Genoud, An inhomogeneous L^2 critical nonlinear Schrödinger equation, *Z. Anal. Anwend.* **31** (2012), 283–290.

10. F. Genoud, Global bifurcation for asymptotically linear Schrödinger equations, *NoDEA Nonlinear Differential Equations Appl.* **20** (2013), 23–35.

11. F. Genoud, B.P. Rynne, Half eigenvalues and the Fučík spectrum of multi-point, boundary value problems, *J. Differential Equations* **252** (2012) 5076–5095.

12. F. Genoud, Bifurcation along curves for the p-Laplacian with radial symmetry, *Electron. J. Differential Equations* **2012**, no. 124.

13. F. Genoud, B.P. Rynne, Landesman-Lazer conditions at half-eigenvalues of the p-Laplacian, *J. Differential Equations* **254** (2013), 3461–3475.

14. F. Genoud, Orbitally stable standing waves for the asymptotically linear one-dimensional NLS, *Evolution Equations and Control Theory* **2** (2013), 81–100.

15. A. Derlet, F. Genoud, Existence of nodal solutions for quasilinear elliptic problems in $\mathbb{R}^N$, *Proc. Roy. Soc. Edinburgh Sect. A* **145** (2015), 937–957.

16. F. Genoud, D. Henry, Instability of equatorial geophysical water waves with an underlying current, *J. Math. Fluid Mech.* **16** (2014), 661–667.

17. V. Combet, F. Genoud, Classification of minimal mass blow-up solutions for an L^2 critical inhomogeneous NLS, *J. Evol. Equ.* **16** (2016), 483–500.

18. F. Genoud, B.A. Malomed and R.M. Weishäupl, Stable NLS solitons in a cubic-quintic medium with a delta-function potential, *Nonlinear Anal.* **133** (2016), 28–50.

19. F. Genoud, Extrema of the dynamic pressure in a solitary wave, *Nonlinear Anal.* **155** (2017), 65–71.

20. F. Genoud, Instability of an integrable nonlocal NLS, *C. R. Math. Acad. Sci. Paris* (2017), http://dx.doi.org/10.1016/j.crma.2017.01.018

Research articles submitted for publication

21. S. Bachmann, F. Genoud, Scaling limits and phase transitions for nematic liquid crystals in the continuum, submitted, preprint http://arxiv.org/abs/1508.05025

Book chapters

22. S. de Bièvre, F. Genoud, S. Rota-Nodari, Orbital stability: analysis meets geometry, in: C. Besse, J. C. Garreau (eds.), *Nonlinear Optical and Atomic Systems*, Lecture Notes in Mathematics 2146, Springer, 2015, pp. 147–273.

Refereed conference proceedings

23. F. Genoud, Nonlinear Schrödinger equations on $\mathbb{R}$: global bifurcation, orbital stability and nonlinear waveguides, *Commun. Appl. Anal.* **15** (2011), 395–412.

24. F. Genoud, B.P. Rynne, Some recent results on the spectrum of multi-point eigenvalue problems for the p-Laplacian, *Commun. Appl. Anal.* **15** (2011), 413–434.

25. F. Genoud, Some bifurcation results for quasilinear Dirichlet boundary value problems, *Electron. J. Differential Equations*, Conference 21 (2014), 87–100.

26. F. Genoud, Monotonicity of bifurcating branches for the radial p-Laplacian, *Monografías del Sem. Matemático García de Galdeano* **39** (2014), 111–119.

Other publications

F. Genoud, Around the theorem of Whittaker-Shannon-Kotel'nikov, *Master Thesis*, EPFL (2005).

F. Genoud, Théorie de bifurcation et de stabilité pour une équation de Schrödinger avec une non-linéarité compacte, *PhD Thesis* 4233, EPFL (2008).