

**CURRICULUM VITAE**  
**Juan Pablo Rossetti**

**Position**

- Adjoint Professor at FaMAF, Universidad Nacional de Córdoba;
- Assistant Researcher, CONICET.

**Education**

- Licenciante in Mathematics, FaMAF, Universidad Nacional de Córdoba, March 1992
- Ph.D. in Mathematics, FaMAF, Universidad Nacional de Córdoba, April 1999. Thesis title: “Variedades de Hantzsche-Wendt e Isospectralidad” (“Hantzsche-Wendt manifolds and Isospectrality”). Supervisor: Roberto J. Miatello.
- Postdoctoral fellowship, CONICET, to study in Dartmouth College, New Hampshire, USA, 2000-2002. Supervisor: Carolyn S. Gordon.
- Visiting Fellow in Princeton University, August 2002–July 2003, with a fellowship from the John Simon Guggenheim Memorial Foundation to study with John H. Conway.

**Research interest:** Lattices, Crystallographic groups, Inverse spectral geometry.

**Publications**

- *Hearing the Platycosms*, with John H. Conway. Preprint. ArXiv: math.DG/0311470.
- *Describing the Platycosms*, with John H. Conway. Preprint. ArXiv: math.DG/0311476.
- *Tetra and Didi, the cosmic spectral twins*, with Peter Doyle. Preprint. <http://math.dartmouth.edu/~doyle/>
- *Generalized Hantzsche-Wendt manifolds*, with Andrzej Szczepanski. (accepted in Revista Matemática Iberoamericana)

- *Boundary Volume and Length Spectra of Riemannian Manifolds: What the Hodge Spectrum Doesn't Reveal*, with Carolyn S. Gordon. *Annales de l'Institut Fourier* **53** no. 7 (2003), 2297–2314.
- *Length spectra and  $p$ -spectra of compact flat manifolds*, with Roberto J. Miatello. *Journal of Geometric Analysis*, **13**, no. 4, (2003), 631–657. Available at the Math. ArXiv, math.DG/0110325.
- *Comparison of twisted  $p$ -form spectra for flat manifolds with diagonal holonomy*, with R.J. Miatello. *Annals of Global Analysis and Geometry*, **21** (2002), 341–376.
- *Flat Manifolds Isospectral on  $p$ -forms*, with R.J. Miatello. *Journal of Geometric Analysis*, **11** (2001), 649–667.
- *Hantzsche-Wendt Manifolds of Dimension 7*, with R.J. Miatello. Proceedings of the VIIth International Conference on “Differential Geometry and Applications”, Brno, Czech Rep. 1988, pages 379–390 (1999).
- *Isospectral Hantzsche-Wendt Manifolds*, with R.J. Miatello. *Journal für die Reine und Angewandte Mathematik (Crelle's Journal)*, Vol. **515** (1999), pages. 1–23.
- *Five-Dimensional Bieberbach Groups with Holonomy Group  $\mathbb{Z}_2 \oplus \mathbb{Z}_2$* , with Paulo Tirao. “*Geometriae Dedicata*”, Vol. **77** (1999), pages. 149–172.
- *Compact flat manifolds with holonomy group  $\mathbb{Z}_2 \oplus \mathbb{Z}_2$  (II)*, with Paulo Tirao. “*Rendiconti del Seminario Matematico dell'Università di Padova*”, Vol. **101** 3 (1999), pages. 99–136.
- *Compact flat manifolds with holonomy group  $\mathbb{Z}_2 \oplus \mathbb{Z}_2$* , with Paulo Tirao. *Proc. of the Amer. Math. Soc.*, Vol. **124** (1996), pages. 2491–2499.

## Expositions

- *Hearing the platycosms (flat 3-manifolds)*. Inverse Spectral Geometry Workshop, Dartmouth College, November 20-22, 2003.
- *Isospectrality of flat 3-manifolds. Can you hear the shape of the universe?*, Stony Brook, USA, February 2003.

- *What the middle degree Hodge spectrum doesn't reveal*, Workshop on Inverse Spectral Geometry, University of Kentucky, USA, June 2002.
- *Spectrum and length spectrum of compact hyperbolic surfaces*, seminar talk at Dartmouth College, February 2002.
- *Length spectra and  $p$ -spectra of compact flat manifolds*, Workshop on Inverse Spectral Problems at Dartmouth College, June 2001.
- *Finite spectrum and a partial converse of Sunada's theorem in the case of flat manifolds of diagonal type*, three seminar talks at Dartmouth College, October 2000.
- *Flat manifolds isospectral on  $p$ -forms*. Departmental Colloquium of the Mathematics Department at Dartmouth College, September 2000.
- *Isospectral Hantzsche-Wendt Manifolds*, seminar talk at Dartmouth College, May 1999.
- *Isospectral Flat Manifolds*. Presented in the conference "Crystallographic Groups and their Generalizations", Kortrijk, Belgium, May 1999.
- *Isospectral Hantzsche-Wendt Manifolds*. Presented in the conference "Differential Geometry and Applications", Brno, Czech Rep., August 1998.

### **Distinctions**

- Fellowship from the International Mathematical Union to assist to the International Congress of Mathematicians, Berlin 1998.
- Standard-bearer at FaMAF in 1988.
- National Competition of Mathematics "Ernesto Paenza":  
1986 Second place (shared with the third one), 1987 second place, 1988 third place (shared with the fourth and fifth ones)

### **Others**

- Reviewer of the journal "Mathematical Reviews" since 1997.
- Member of the Coordinating Commission of the "VI Olimpiada Iberoamericana de Matematica", Córdoba, September 1991.

- Member of the jury of corrections of the Argentinian Mathematical Olympiad (OMA) in the region “Córdoba” during the period 1992–2000.
- Participant of academic tasks in the National Final of the OMA during the years 1992–1997.
- Member of the Jury in the XVI National Final of OMA, La Cumbre, November 1999.

February 2004