

# CURRICULUM VITAE FRANCESCA ASTENGO

## CONTACT DETAILS

- Dipartimento di Matematica, Università degli Studi di Genova, Via Dodecaneso 35, 16146 Genova (tel. 010 3536827, fax 010 3536752).
- e-mail: [astengo@dima.unige.it](mailto:astengo@dima.unige.it)

## EDUCATION

- 4 april 1991: Laurea in Matematica, Università degli Studi di Genova, *cum laude*, under the supervision of prof. Giancarlo Mauceri.
- 24 january 1997: PhD in Mathematics, thesis *Moltiplicatori su estensioni armoniche di gruppi di tipo Heisenberg*, under the supervision of prof. G. Mauceri.

## POSITIONS

- October 1990: C.N.R. grant (borsa di studio annuale per laureandi, bando n° 209.01.53 del 22/01/1990).
- February 1992: PhD student in Mathematics, University of Torino.
- December 1994: assistant professor, Politecnico di Torino
- November 1999: assistant professor, University of Genova.
- December 2009: associate professor, University of Genova.

## PAPERS

- (1) F. Astengo, The maximal ideal space of a heat algebra on solvable extensions of H-type groups, *Boll. Un. Mat. Ital.* 9-A (1995), 157-165.
- (2) F. Astengo, Multipliers for a distinguished laplacean on solvable extensions of H-type groups, *Monatsh. Math.* 120 (1995), 179-188.
- (3) F. Astengo, A class of  $L^p$  convolutors on harmonic extensions of H-type groups, *J. Lie Theory* 5 (1995), 147-164.
- (4) F. Astengo, R. Camporesi, and B. Di Blasio, The Helgason Fourier transform on a class of nonsymmetric harmonic spaces, *Bull. Austral. Math. Soc.* 55 (1997), 405-424.
- (5) F. Astengo and B. Di Blasio, A Paley-Wiener theorem on NA harmonic spaces, *Colloq. Math.* 80 (1999), 211-233.

- (6) F. Astengo, M. Cowling, B. Di Blasio, and M. Sundari, Hardy's uncertainty principle on certain Lie groups, *J. London Math. Soc.* 62 (2000), 461-472.
- (7) F. Astengo and B. Di Blasio, The Schwartz space and homogeneous distributions on H-type groups, *Monatsh. Math.* 132 (2001), 197-214.
- (8) F. Astengo, An uncertainty principle on homogeneous trees, *Proc. Amer. Math. Soc.* 131 (2003), 3155-3161. View electronically published article.
- (9) F. Astengo, M. Cowling, and B. Di Blasio, The Cayley transform and uniformly bounded representations, *J. Funct. Anal.* 213 (2004), 241-269.
- (10) F. Astengo and B. Di Blasio, Geodesic inversion and Sobolev spaces on Heisenberg type groups, *Ark. Mat.* 43 (2005), 51-67.
- (11) F. Astengo and B. Di Blasio, Sobolev spaces and the Cayley transform, *Proc. Amer. Math. Soc.* 134 (2006), 1319-1329.
- (12) F. Astengo and B. Di Blasio, The Gelfand transform of homogeneous distributions on Heisenberg(-type) groups, *J. Austral. Math. Soc.* 81 (2006), 297-319.
- (13) F. Astengo, B. Di Blasio, and F. Ricci, Gelfand transforms of polyradial Schwartz functions on the Heisenberg group, *J. Funct. Anal.* 251 (2007), 772-791.
- (14) F. Astengo and B. Di Blasio, Some properties of horocycles on Damek-Ricci spaces, *Differential Geom. Appl.* 26 (2008), 676-682.
- (15) F. Astengo, B. Di Blasio, and F. Ricci, Gelfand pairs on the Heisenberg group and Schwartz functions, *J. Funct. Anal.* 256 (2009), 1565-1587.
- (16) F. Astengo and B. Di Blasio, Huygens' principle and a Paley-Wiener type theorem on Damek-Ricci spaces, *Ann. Math. Blaise Pascal* 17 (2010), 327-340.
- (17) F. Astengo and B. Di Blasio, Dynamics of the heat semigroup in Jacobi analysis, *J. Math. Anal. Appl.* 391 (2012), 48 - 56.
- (18) F. Astengo, B. Di Blasio, and F. Ricci, Fourier transform of Schwartz functions on the Heisenberg group, *Studia Math.* 214 (2013), 201-222.
- (19) F. Astengo, B. Di Blasio, and F. Ricci, Paley-Wiener theorems for the  $U(n)$ -spherical transform on the Heisenberg group, *Ann. Mat. Pura Appl.* 194 (2015), 1751-1774.
- (20) F. Astengo, M. Cowling, and B. Di Blasio, Uniformly bounded representations of  $SL(2, \mathbb{R})$ , arXiv:1706.09312, *J. Funct. Anal.* 276 (2019), 127-147.
- (21) F. Astengo, M. Cowling, and B. Di Blasio, Uniformly bounded representations and completely bounded multipliers of  $SL(2, \mathbb{R})$ , arXiv:1707.08329, *Adv. Oper. Theory* 3 (2018), 247-270.