

# CURRICULUM VITAE Nora Muler

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## Education

Licenciatura in Mathematics with honors, Universidad de Bs.Aires, Argentina.  
Doctor. in Mathematics, Universidad de Buenos Aires, Argentina.  
Title : Visco-Plasticidad y Elasto-Plasticidad dinámica.  
Advisor: Prof. Enrique Lami Dozo .  
Postdoctoral Studies at the Institute for Advanced Study, Princeton.

## Fellowships

Doctoral Scholarship. Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) , Argentina.  
Postdoctoral Fellowship at the Organización de Estados Americanos (OEA) .

## Professional Experience

Associated professor in the department of Mathematics and Statistics. Universidad Torcuato Di Tella from June 2008.

Assistant professor in the department of Mathematics and Statistics. Universidad Torcuato Di Tella, 2000-2008.

Professor at the "Maestria de Economía", Universidad Torcuato di Tella, 2003-2004.

Professor at the "Posgrado en Economía Pública" Instituto Torcuato di Tella -Banco Interamericano de Desarrollo, 1997-2000.

Professor at the "Posgrado de Economistas de Gobierno". ISEG. 1997-2000.

Profesor Investigador Universidad Torcuato Di Tella: 1995-2000.

Jefe de Trabajos Practicos, Departamento de Matematica, Universidad de Buenos Aires:1992-1996.

## Research Interest

Statistical Methods for Time Series.  
Mathematical Models in Finance and Insurance.

Differential Equations.

## Member of the Organizer Committee at:

2do Encuentro Regional de Probabilidad y Estadística Matemática. Buenos Aires. December 2005.

3er Encuentro Regional de Probabilidad y Estadística Matemática. Buenos Aires. December 2006.

International Conference on Robust Statistics (ICORS 2007). Buenos Aires. September 2007.

## Publications and Preprints

Optimizing the survival probability of an insurance company allowing investments in non-liquid assets. Co-author: Pablo Azcue (Universidad Torcuato di Tella). Submitted.

Optimal investment policy and dividend payment strategy in an Insurance Company. Co-author: Pablo Azcue (Universidad Torcuato di Tella).  
Annals of Applied Probability, 20, 1253-1302 (2010).

Robust Estimates for ARMA Models

Co-authors: Daniel Peña (Universidad Carlos III) and Víctor Yohai (Universidad de Buenos Aires and CONICET).

Annals of Statistics, 37, 816-840 (2009).

Optimal investment strategy to minimize the ruin probability of an insurance company under borrowing constraints.

Co-author: Pablo Azcue (Universidad Torcuato di Tella).

Insurance: Mathematics and Economics, 44, 26-34 (2009)

Robust Estimates for GARCH Models.

Co-author: Víctor Yohai (Universidad de Buenos Aires and CONICET)..

Journal of Statistics Planning and Inference, 138,2918-2940, (2008)

Optimal Reinsurance and Dividend Distribution Policies in the Cramer-Lundberg model.

Co-author: Pablo Azcue (Universidad Torcuato di Tella),

Mathematical Finance ,15, 261-308 (2005).

Characterization of Optimal Reinsurance and Dividend Distribution in the Cramer-Lundberg Model. Numerical Solutions.

Co-author: Pablo Azcue (Universidad Torcuato di Tella),

Proceedings of the First Brazilian Conference on Statistical Modeling in Insurance and Finance. 234-237, (2003).

Optimal Reinsurance and Dividend Distribution Policies in the Cramer Lundberg Model: A Viscosity Solution Approach.

Co-author: Pablo Azcue (Universidad Torcuato di Tella),

Proceedings of the First Brazilian Conference on Statistical Modeling in Insurance and Finance. 68-71, 2003.

Robust Estimates for ARCH Models.

Co-author: Víctor Yohai (Universidad de Buenos Aires and CONICET).

Journal of Time Series Analysis Vol 23 2002.

A Uniform Bound for a time-discrete regularization of a forward-backward parabolic equation. Indiana University Mathematics Journal, Vol 45, 1996

A Uniform Bound for Solutions of the Cahn Hilliard Equation.

Coauthor: Luis Caffarelli (University of Texas, Austin).

Archive for Rational Mechanics, Vol 133, 1995.

Dynamical Elasto Plasticity with non linear hardening. Preprints Instituto Argentino de Matemática, CONICET, 1992.

An Implicit Scheme for Elasto Plasticity. Lat. Am. Appl. Res. 1992

## **Some Seminars and Conferences:**

6th World Congress of the Bachelier Finance Society. Toronto (2010).

14th International Congress on Insurance: Mathematics and Economics. Toronto (2010).

International Conference on Robust Statistics (ICORS 2009), Parma (2009)

IV International Symposium on Nonlinear Equations and Free Boundary Problems . Mar del Plata (2009).

5th Conference in Actuarial Finance. Samos (2008).

4to Encuentro Regional de Probabilidad y Estadística Matemática. Solis (2007).

Joint seminar Analysis and Mathematical Finance. University of Texas, Austin (2006).

Workshop on Robustness and Statistical Inference in Honor of Victor Yohai. Universidad Carlos III de Madrid (2006).

International Congress on the Applications of Mathematics (ICAM 2006). Santiago de Chile (2006).

Second Brazilian Conference on Statistical Modeling in Insurance and Finance, Maresias (2005).

International Conference on Robust Statistics, University of Jyväskylä (2005)

3rd Conference in Actuarial Science and Finance. Samos (2004).

IX CLAPEM. Punta del Este (2004)

II Congreso Internacional de Matemática Aplicada a la Ingeniería. Buenos Aires (2003)

First Brazilian Conference on Statistical Modelling in Insurance and Finance. Ubatuba (2003)

Segundo Encuentro Italo-Argentino de Matemática Pura y Aplicada. Buenos Aires (2002).

Segundo Encuentro Italo-Argentino de Matemática Pura y Aplicada. Buenos Aires (2002).

International Conference on Robust Statistics. University of British Columbia, Vancouver (2002).

VIII Scola de Econometría, Nova Friburgo, Rio de Janeiro (1999).

III Congreso Iberoamericano de Estadística y VII Congreso Latinoamericano de Probabilidad y Estadística Universidad Nacional de Córdoba (1998).

XXV Coloquio Argentino de Estadística, Mar del Plata 1997.

Workshop on Fluid Mechanics. International Center for Mathematical Sciences. Edinburgh, (1995).

Conference on Nonlinear Differential Equations. John Hopkins University, Baltimore (1994).

International Workshop on Differential Equations. Academia de Ciencias. Buenos Aires (1994)