1. Personal data

Full Name**:** Margarida Maria Araújo Brito
Nationality: Portuguese

Institutional address
Departamento de Matemática Aplicada
Rua do Campo Alegre, 687
4169-007 Porto
email**:** mabrito@fc.up.pt

2. Academic degrees

"Docteur en Mathématiques", Univ. Pierre et Marie Curie – Paris VI, 1987.
"DEA en Statistiques", Univ. Pierre et Marie Curie - Paris VI, 1983.
"Licenciatura em Matemática, ramo científico de Estatística", Faculdade de Ciências e Tecnologia da Universidade de Coimbra (UC), 1981.

3. Previous and current scientific and professional positions

"Professora Associada", Departamento de Matemática Aplicada (DMA),Faculdade de Ciências, Universidade do Porto (UP), since 1993.
"Professora Auxiliar", Faculdade de Ciências, UP, 1988-1993.
"Assistente", Faculdade de Ciências, UP, 1984-1988.
"Assistente Estagiária", Faculdade de Ciências, UP, 1981-1984.
"Monitora", Faculdade de Ciências e Tecnologia, UC, 1979-1981.

Member of CMUP (Centro de Matemática da Universidade do Porto) since 2003. Principal investigator of the Research Area Numerical Analysis, Probability and Statistics since 2007.
Member of the Direction of CMAUP (Centro de Matemática Aplicada da UP) up to 2003.

4. Present research interests

Tail-index estimation. Bootstrap-type procedures. Risk theory. Characterisation of order statistics of multivariate samples.

5. Supervising experience

PhD thesis:
Estimation of the exponential tail-coefficient. Applications to risk theory, Ana Cristina G. M. Moreira de Freitas, Tese de Doutoramento em Matemática UP, 2005.

Supervision of MSc thesis (since 2000):
-Nonparametric quantile regression; the nonparametric estimator of Chaudhuri, Alexandra Cristina Bica, Mestrado em Estatística, UP, 2007 (in collaboration with Maria Manuela Souto de Miranda, University of Aveiro).
-Upper tail dependence between index PSI 20 and the main indices of financial markets, Diana Alves, Mestrado em Engenharia Matemática, UP, 2007 (in

collaboration with Sílvio Gama, UP).
- A perturbed risk process: numerical approximations to the ruin probability, Manuel Silva, Mestrado em Estatística, UP, 2006.
- Ruin problems. A risk process with dependence, Jorge Daniel Leite, Mestrado em Estatística UP, 2005.
- The effect of temporal aggregation on prevision, Mónica Cristina Salgado, Mestrado em Estatística UP, 2006 (in collaboration with Maria Eduarda Silva, UP).
- Temporal aggregation for ARIMA processes, Dolores Ferreira, Mestrado em Estatística UP, 2005. (in collaboration with Maria Eduarda Silva, UP).
- The use of the Sharpe ratio in the analysis of market risk, Pedro Cardoso, Mestrado em Estatística UP, 2002.
- Minimization of risk measures: two points of view, Sandra Duarte, Mestrado em Estatística UP, 2002.
- Analysis and treatment of outliers in time series, Catarina Ribeiro, Mestrado em Estatística UP, 2002 (in collaboration with Maria Eduarda Silva,UP).
- Linear models for time series in the presence of outrliers, Carla Miranda, Mestrado em Estatística UP, 2001 (in collaboration with Maria Eduarda Silva, UP).
- Bootstrap and iterated bootstrap, Jorge Freitas, Mestrado em Matemática Aplicada UP, 2001.
- Time series with heavy tailed positive innovations, Pedro Vieira, Mestrado em Estatística UP, 2000 (in collaboration with Maria Eduarda Silva,UP).

6. Participation in the organization conferences

Recent Events:

Member of the Scientific Committee of enspm’08 (National Meeting of the Portuguese Mathematical Society), Coimbra, 2008.

Member of the Scientific Committee of Bernoulli Society satellite meeting of ISI'2007: Probability and Statistics in Science and Technology, Porto, 2007.

Member of the Local Programme Committee of the 56th Session of the International Statistical Institute (ISI), Lisbon, 2007.

Member of the Scientific and Executive Committee of the XV Annual Conference of the Portuguese Society of Statistics (SPE), Lisboa, 2007.

7. Publications

Thesis

Encadrement presque sûr des statistiques d’ordre

Selected publications

Brito, M. and Moreira Freitas, A.C., Edgeworth expansion for an estimator of the adjustment coefficient, Insurance: Mathematics & Economics (2008), to appear.

Brito, M. and Moreira Freitas, A.C., Weak convergence of a bootstrap geometric-type estimator with applications to risk theory, Insurance: Mathematics and Economics 38 (2006), 571-584.

Brito, M., Estabilidade e comportamento limite forte das estastísticas de ordem, in “Memorial da Sociedade portuguesa de Estatística, ed. F. Rosado, ed. SPE (2005), 199-213.

Brito, M. and Moreira Freitas, A.C., Limiting behaviour of a geometric-type estimator

for tail indices, Insurance: Mathematics and Economics 33 (2003), 211-226.
Barme-Delcroix, M. F. and Brito, M., Multidimensional stability and strong limiting behaviour of intermediate order statistics, Journal of Multivariate Analysis 79 (2001), 157-170.
Brito, M., A Metodologia Bootstrap. Validade assimptótica e alguns casos de êxito, in "A Estatística em Movimento", eds. M. M. Neves et al, Ed. SPE (2001), 15-37.
Bacro, J. N. and Brito, M., A tail bootstrap procedure for estimating the tail Pareto-index, J. Statistical Planning and Inference 71 (1998), 245-260.
J. N. Bacro e M. Brito, On Mason"s extension of the Erdos-Rényi law of large numbers, Statistics & Probability Letters 11 (1991), 43-47.

8. Invited Communications in Conferences

Uniform estimation of isobars, Extreme Days in Lille, Lille, France, 2006 (work in collaboration with M. F. Barme, Univ. of Lille).
Tail bootsrap and the estimation of tail parameters, "Workshop: V. E.X.T.R.A.", 3-6, Centro de Estatística e Aplicações, Tomar, 2003.
A Metodologia Bootstrap. Validade assimptótica e alguns casos de exito, VIII Congresso Anual da Sociedade Portuguesa de Estatística, Peniche, 2000.

9. Languages

Portuguese (mother language), English and French.