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Curriculum Vitæ

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Date and place of birth: December 3, 1953 in Barcelona; Catalonia
Citizenship: Spanish

CURRENT AND PREVIOUS POSITIONS

- Full Professor at the Departament de Matemàtiques, Universitat Autònoma de Barcelona (UAB), Catalonia, since 1984.
- Member of the Royal Academy of Sciences and Arts of Barcelona (RACAB)
- Member of the Institut d'Estudis Catalans(IEC), secció de Ciències i Tecnologia.
- 1/01/1976—16/04/1980: UAB (Mathematics), *Several short term positions*.
- 17/04/1980—30/09/1980: Universidad de Sevilla (Mathematics), *Associate professor*.
- 1/10/1980—9/2/1984: UAB (Mathematics), *Associate professor*.
- 1/6/98—28/02/02: UAB, *Chairman of the Department of Mathematics*.
- 2007—2015: Generalitat de Catalunya, *Director of the Centre de Recerca Matemàtica (CRM)*.

EDUCATION

- Jul 1975: 5 year degree in Mathematics at the Universitat de Barcelona.
- Dec 1978: Ph.D. in Mathematics, Universitat Autònoma de Barcelona.

RESEARCH INTERESTS

Classical analysis, Complex Analysis in one or several variables, Harmonic Analysis, Function Theory, Mathematical foundations of signal processing, Applications of mathematics to industry

TEN MOST RELEVANT PUBLICATIONS

1. *Boundary interpolation sets for holomorphic functions smooth to the boundary and BMO*, J.Bruna, Transactions of the A.M.S., **264(2)** (393–409), 1981.
2. *Closed finitely generated ideals in algebras of holomorphic functions smooth to the boundary in strictly pseudoconvex domains*, J.Bruna-J.M.Ortega, Math. Annalen, **268** (137–157), 1984.
3. *Holomorphic approximation and estimates for the $\bar{\delta}$-equation in strictly pseudoconvex non smooth domains*, J.Bruna-J.M.Burgués, Duke Math. Journal, **55(3)** (539–596), 1987.

4. *On Kolmogorov's theorem, the Hardy-Littlewood maximal function and the radial maximal function*, J.Bruna-B.Korenblum, Journal d'Analyse Mathematique, **50** (225–239), 1988.
5. *Convex hypersurfaces and Fourier transforms*, J.Bruna-A.Nagel-S.Wainger, Annals of Mathematics, **127** (333–365), 1988.
6. *Maximal characterizations of Hardy-Sobolev spaces in the unit ball of $\boldsymbol{C}^n$*, P.Ahern-J.Bruna, Revista Matemática Iberoamericana, **4** (123–153), 1988.
7. *On H^p-solutions of the corona equation in the ball*, E.Amar-J.Bruna, Journal of Fourier Analysis, **1** (7–15), 1995.
8. *Zero varieties of the Nevanlinna class in convex domains of finite type*, J.Bruna-Y.Dupain-P.Charpentier, Annals of Mathematics, **147** (391–415), 1998.
9. *Completeness of discrete translates in $L^1(R)$*, J.Bruna-A. Olevskii-A.Ulanovskii, Revista Matemática IberoAmericana, **22** (1–16), 2006.
10. *Characterizing Abelian Admissible groups*, J.Bruna-J.Cufi-H.Fuhr-M.Miro, Journal of Geometric Analysis, **25(02)** (1045-1074), 2015.

PHD THESIS SUPERVISION

1. *Joan del Castillo* in The Henkin kernel in convex domains, Joan del Castillo (year of defence: 1984).
2. *Josep Maria Burgués* in Holomorphic approximation and estimates for the $\overline{\partial}$- equation in strictly pseudoconvex compact sets, Josep Maria Burgués (year of defence: 1985).
3. *Carme Cascante* in Restriction and interpolation theorems for holomorphic and pluriharmonic functions in submanifolds of the unit sphere, Carme Cascante (year of defence: 1987).
4. *Daniel Pascuas* in Zero sets and interpolation in spaces of holomorphic functions in the unit disk, Daniel Pascuas (year of defence: 1987).
5. *Francesc Tugores* in Estimates for the $\overline{\partial}$-equation and the Bergman projection, Francesc Tugores (year of defence: 1991).
6. *Francesc Massaneda Clares* in Zero sets and interpolation in function spaces of slow growth, Francesc Massaneda Clares (year of defence: 1993).
7. *Joaquim Ortega Cerdà* in Zero varieties and interpolating sequences, Joaquim Ortega Cerdà (year of defence: 1995).
8. *Gerard Ascensi* in $L^p(R)$-generators with time-frequency translates, Gerard Ascensi (year of defence: 2007).
9. *Margarida Miro* in Admissible functions and orthonormal wavelets in R^n, Margarida Miro (year of defence: 2010).
10. *Nestor Costa* in Industrial Doctorate: mathematical aspects of optical encoders, Nestor Costa (year of defence: 2018).

CONTRACTS, PATENTS, ENTREPRENEURSHIP AND INNOVATION

- Founder of the Mathematical Consulting Service of UAB and director from 1999 to 2002
- Optimal fleet study for Repsol, Minor Planet SA and Complex Systems, 2001
- Optimal digital pseudocodes for optical encoders, for Hohner Iberica, 2013
- A tool for optimal task allocation, for Ferrovial Servicios, 2015
- European patent EP18382082.2, An optical incremental encoder, a mask for an optical incremental encoder and a method to calculate the shape of mask slots in opticla incremental encoders, 2018.
- With Rafael Sala and Ricard Alemany, cofounder of RISKRANGE S.L., an online financial rating tool 2015-2017 (presently dissapeared)