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CURRICULUM VITA et STUDIORUM (Last five years):

Blanca Ayuso de Dios

EDUCATION

June 1996	<i>Licenciada</i>	Mathematics	Universidad Autónoma de Madrid
January 1999	<i>Licenciada con Grado</i>	Mathematics	Universidad Autónoma de Madrid
October 2003	<i>Ph.D.</i>	Mathematics	Universidad Autónoma de Madrid

APPOINTMENTS: CURRENT & PAST ACADEMIC AND RESEARCH EMPLOYMENT

- CURRENT POSITION: Associate Professor of Numerical Analysis (MAT-08), Dipartimento di Matematica e Applicazioni, Università degli Studi di Milano Bicocca, (Sept 2018–present).
- 09/14 – 09/18: Associate Professor, Dipartimento di Matematica, Università di Bologna, (on leave Oct 2015–Jan 2017)
- 10/15–01/17: Professor (W2) of Numerical Mathematics, Institute of Mathematics, Technical University of Hamburg, TUHH, Hamburg, Germany

EDITORIAL DUTIES:

- SIAM Journal on Numerical Analysis (SINUM) (since Jan 2020)

REVIEWER

ANEP (Agencia Nacional de Evaluación y Prospectiva) (1 projects in 2015 and 2017), BSF (United States-Israel Binational Science Foundation) (1 project 2015); FONDECYT (Chilean National Science and Technology Commission) (1 projects in 2016 and 2017); MIUR (Ministero dell'Istruzione dell'Università e della Ricerca) (1 project 2018).

MEMBER OF PHD (EXAMINATION) COMMITTEE

- Cecilia Pagliantini, *Computational Magnetohydrodynamics with discrete differential forms*, Seminar für Applied Mathematics, SAM, ETH-Zürich (September 14th, 2016)
- Ali Dorostkar, *Analysis and Implementation of Preconditioners for Prestressed Elasticity Problems*, Division of Scientific Computing Department of Information Technology, Uppsala University, Sweden (December 8th, 2017)
- Kyle Dunn, *A Cut Finite Element Immersed Boundary Method and its Application to a Chemotaxis Model*, Department of Mathematics, Worcester Polytechnic Institute (WPI), US (July 13th, 2018)

INVITED ADDRESSES IN WORKSHOPS

- Workshop "Discontinuous Galerkin methods and Nonlinear PDE's" in IACM-FORTH, Heraklion, Crete, June 14-15, 2019
- Workshop: "Numerical Analysis of Coupled and Multi-Physics Problems with Dynamic Interfaces", at BIRS-Casa-Matematica, Oaxaca (Mexico), July 29th-August 3th, 2018.
- Workshop "Numerical Analysis for PDEs", (Organised by Charlie Elliot, Andreas Dedner & Charalambos Makridakis), Mathematics Institute of the University of Warwick, UK, April 3th-7th, 2017
- Workshop "New Trends in Quantum and Classical Kinetic Equations and Related PDEs", (Organised by Shi Jin & Christoph Sparber), University of Wisconsin-Madison, US, October 6th-8th, 2016
- Workshop on discontinuous Galerkin methods, University of Heidelberg, Dec 2015.
- Workshop on Computational Engineering, at Mathematisches Forschungsinstitut Oberwolfach, Sept-Oct 2015

SYNERGISTIC ACTIVITIES

- Member of the Committee on Gene Golub SIAM Summer School (Since Jan 2021)
- Co-Organizer of Minisymposia: *Solution techniques for nonstandard discretization methods: Theory and Applications*, at DD26, Hong Kong, December 2020, (online) (8 speakers) Co-organizer: S.C. Brenner
- Co-Organizer of Minisymposia: *Solvers for nonstandard discretization methods: Theory and Applications*, at DD25, St Johns, Canada, 2018. (12 speakers) Co-organizer: S.C. Brenner

PUBLICATIONS

- 1 B. Ayuso de Dios, K. Lipnikov and M. Manzini, *The NonConforming Virtual Element Method*, Esaim: M2AN, (2016)
- 2 P. F. Antonietti, B. Ayuso de Dios, I. Mazzieri and A. Quarteroni, *Stability Analysis for Discontinuous Galerkin approximations of the elastodynamics problem*, J. Sci. Computing, (2016)
- 3 B. Ayuso de Dios, C. Pagliantini and R. Hiptmair *Auxiliary space preconditioners for Interior Penalty discontinuous Galerkin approximation to $H(\text{curl}; \Omega)$ -elliptic problems*, IMA J. of Numerical Analysis, Vol. 37, no. 2, pp. 646–686. (2017).
- 4 B. Ayuso de Dios, C. Pagliantini and R. Hiptmair *Auxiliary space preconditioners for a DG discretization of $H(\text{curl}; \Omega)$ -elliptic problems on hexahedral meshes*, Domain decomposition methods in science and engineering XXIV, 223–231, Lect. Notes Comput. Sci. Eng., 125, Springer, (2018)
- 5 B. Ayuso de Dios, K. Dunn, M. Sarkis, and S. Scacchi, *Dirichlet-Neumann Preconditioning for Stabilised Unfitted Discretization of High Contrast Problems*, Domain decomposition methods in science and engineering XXV, 67–74, Lect. Notes Comput. Sci. Eng., 138, Springer, (2020)