<div align="center">**Academic Curriculum Vitae**</div>

Professor in Applied Mathematics-Computational Sciences-Scientific AI
INSA & Mathematics Institute of Toulouse, France.

Professional Positions

Since 2008	Professor at INSA Toulouse, member of the Mathematics Institute of Toulouse (IMT).
2014	Visiting Research Scientist at JPL/CalTech-NASA (California) .
	Visiting Professor at Univ. California, Irvine .
1996 - 2008	Ass. Professor (Maître de Conférences) at Grenoble Institute of Technology (Ensimag school).
	Member of the Applied Math. LJK lab., Grenoble, France.
2004 - 2006	Visiting Research Scientist at INRIA [1], France.
2001 - 2002	Secondment to Ministry of Foreign Affairs. Administrative and teaching duty, Indonesia.
1996	Postdoctoral research fellow at Math. lab. of Lisbon, Portugal (5 months).

Research Fields

Mathematical and numerical modelling, computational sciences, scientific AI.
Inverse problems, data assimilation, geophysical fluid flow models.
Real-world problems in river hydraulics-inundations, hydrology, lavas, glaciology.

Responsabilities - Services

INSA Toulouse (Institute of Technology / School) (period 2008-present).
- President of the Restricted Board of Directors (2022-25).
   Career management policy, research affairs.
- Member of the Board of Directors and numerous of its committees (2022-25).
- Member of the Foresight Committee (2018-20). *https ://insa2040.insa-toulouse.fr*
- Member of the Scientific Board (2019-22).
- Deputy-Director of the Applied Mathematics department (3y).
- President of the Hiring Committee in Applied Mathematics (2y).
- Lead of the Master Sc. "Computational Sciences", dept of Applied Math. (5y).
- Lead of the International Relations of the Applied Math dept (5y).
- Creation of Open Online Courses : mathematical analyses (x3), finite elements &
model reductions, data assimilation. *https ://www.math.univ-toulouse.fr/∼jmonnie/Enseignement/Courses.html*

University of Toulouse (UT) (period 2019-present).
- Appointed member of the Innovation Project Committee
Toulouse Initiative for Research's Impact on Society -TIRIS- (2023-XX).
- Appointed member of the Steering Committee for the RTRA STAE-Env'IA Working Group (2019-21).
- Member of the Academic Council UFTMiP (2y).

Grenoble Institute of Technology (I.T.) (period 1998-2008).
- Lead of the Master Sc. "Modeling-Computing-Simulation", ENSIMAG school (5y).
- PI of the regional project "Numerical prevention of floods" (3 y).
- Member of the Board of Directors of ENSIMAG school (3y).
- Member of the Scientific Board of Grenoble I.T. (3y).
- Member of the Hiring Council in Appl. Math. & Comput. Sc. (3y).
- Member of the Board of Directors of the learned society SMAI (3y).

Research Highlights

- ≈ 50 articles published in international journals since PhD
    on diversified topics, in diversified journals and scientific communities.
- Lead of the AI chair "PiLearnWater" with O. Roustant. Chaire of the national AI institute ANITI (www.aniti.fr) .
- Member of the Science Team of the SWOT space mission (NASA-CNES) (since 2014).
Sc. Team :∼50 members, multiples international scientific communities from USA, FR, UK, CA, BR.
- Founder and co-lead with P.-A. Garambois of the research project-team MathHydroNum, INRAe-INSA https ://mathhydronum.insa-toulouse.fr.
- Founder and co-developer of the open-source computing code DassFlow
https ://www.math.univ-toulouse.fr/DassFlow/.
Co-founder with INRAe of the DassHydro computing platform (Data Assimilation for Hydrology). https ://github.com/DassHydro.
- Scientific P.I. of a few CNES research projects (since 2015).
    Consult https ://swot.jpl.nasa.gov/hydrology.htm & https ://swot.jpl.nasa.gov/people.htm ?id=39
- *Member of the Algorithm Definition Team (ADT) of the SWOT mission (since 2016).*
Transfer of algorithms including to international programs, industrial collaborations.
- Member of the Steering Committee of the regional "AI & Environnement" program (2019-21).

Education

2007	Habilitation à Diriger des Recherches (HDR, Accreditation to Supervise Research) in Applied Mathematics & Computer Sciences. Grenoble I.T., France.
1995	PhD in Mathematics - Computational Sciences. University of Nice - Sophia-Antipolis.
1992	M. Sc. in Computational Sciences, ESSI school, Sophia-Antipolis.
1992	M. Sc. in Mathematics, University of Nice.
1989	Higher School Preparatory Classes, Nîmes.