

Curriculum Vitæ - Laure BLANC-FERAUD



Born 27/08/1963, three children.

Director of research at CNRS (DR1),

I3S Laboratory – Informatique Signaux et Systèmes à Sophia Antipolis – UMR 7271.

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Education

2000 : HDR Nice Sophia Antipolis University (UNS) “On some inverse Problems in image processing”.

1989 : PhD in image processing at Nice Sophia Antipolis University (UNS).

1986 : Master in Mathematics et Automatic, Paris-Dauphine Univ.

Professional appointments

1989-1990: CISI Engineer at Thomson Sintra ASM

1990-: CNRS researcher, I3S laboratory (1990 : CR, 2003 : DR2, 2011 : DR1).

Research (keywords) :

- Research domain: Inverse problems; Image reconstruction, restoration and denoising; Classification; Segmentation; 3D imaging.
- Methods: variational methods and Partial Derivative Equation; Sparse Models; Bayesian estimation; Optimization (non-)convex.
- Application fields: Biological microscopy; Satellite and aerial imaging; Non destructive control.

Honors and Distinctions

- Knight of the Legion of Honour 2015.
- French Science Academy Award Michel Montpetit 2013.
- Knight of the National Order of Merit 2011.
- PES 2010 and 2014 (Ministry of Education premium for distinguished research activity).
- “Best Paper” award *IEEE Trans. on Signal Proc.* en 1998.

Scientific coordination and organization (national and international)

- Director of CNRS GdR 720 ISIS from 2012 (CNRS structure for scientific animation grouping 164 academic laboratories and fifteen contributing industrial partners).
- President of the scientific council of “Networks, Information and Digital society” department of Côte d’Azur University (UCA) and member of the UCA Academic council from 2016.
- General technical chair of IEEE ISBI conference 2014 (600 participants)
- Associate editor of the journals SIAM Imaging Sciences and Traitement du Signal, 2013-.
- Member of the technical committee IEEE BISP (Biomedical imaging signal processing), 2008-2015.
- Conference Program Committee member of the conferences ISBI, IMDSP, EUVIP, NCMIP, MIA, RFIA.
- Co-leader of the MORPHEME team (I3S/Inria/IBV) from 2011 and of Ariana team (I3S/Inria) de 1998 à 2010.
- Member of the Scientific Council of the National Institute of Information Science and their Interactions of CNRS (INS2I) and invited member of the Scientific Council of the Institute of Engineering and Systems Science of CNRS (INSIS) 2010-2014.
- Member the National Research Strategy working group of the Ministry of Higher Education and Research on Information Society and Communication (challenge number 7) in 2014.
- ANR (National Research Agency): Member of the Scientific Steering Committee challenge 7 Information Society and Communication (2013-2016); Vice President of the SIMI 3 Evaluation Committee (White, JCJC and International White programs) in 2013, member in 2012; Steering Committee of the 2008-2009 DEFIS Program.
- HCERES/AERES (High Council for the Evaluation of Research and higher Education): visiting committees (LABSTICC 2016 (president), LJK 2015, CRISTAL 2013, LIRIS 2010, XLIM 2010).
- Member of INRIA Sophia Antipolis Méditerranée project committee board 2010-2014.
- Member of the scientific councils of ITAV laboratory (Institut des Technologies Avancées en sciences du Vivant in Toulouse) from 2013 and GreyC laboratory (Groupe de Recherche en Informatique, Image, Automatique et Instrumentation de Caen, 2013- 2016).
- Assistant Director of Laboratory I3S, UMR CNRS 7271 (250 members) from 2004 to 2007.
- Member of the scientific committees of CNRS GdR MSPC / MIA (until 2013) and GdR Microscopie fonctionnelle du vivant.
- Member of a hundred PhD and HDR defense committees, of whom about sixty as reviewer.
- Reviewing of foreign projects (Italy, Austria, Germany, Belgium, Swiss, Brazil, Tunisia)

- Regular reviewing for journals IEEE Trans on Image Processing, IEEE Trans. On Signal Processing, IEEE Trans. On Medical Imaging, IJCV, Eurasip Signal Processing, Inverses Problems, JMIV, Signal Image and Video Processing, Journal of the Optical Society of America, Traitement du Signal. et les conférences IEEE ISBI, ICASSP, ICIP, ACVIS, GRETSI, NCMIP.
- Member of hiring committees in image/signal processing, computer science and applied mathematics at several universities (Paris Descartes 2016 (president), IMT Toulouse 2015, Strasbourg university, UNS), member of CNECA 2008-2015 (hiring jury of associate and full professors in agricultural superior schools Bordeaux, Anger, Dijon).
- Member of the Scientific Committee of doctoral school (ED STIC) of UNS 2004-2007.
- Member of board of directors of association GRETSI in Signal/Image processing in France, 2008-2015.
- Member of local committees INRIA (COLOR 2002-2006, CORDIS 06-08).

Publications/Productions

- 12 book chapters, 47 journals with lecture committee (including IEEE Trans. IP, IEEE PAMI, IJCV, SIAM Numerical Analysis, SIAM Imaging Sciences,...)
- 119 communications in conferences with lecture committee
- 1 patent
- Invited and plenary talks (workshops, special sessions in conferences, scientific days): 29 including 12 plenaries.

Contracts

- 8 contracts with companies (CNES, SAGEM-DS, Astrium/EADS, CS-SI, SFIM)

Funding

- Leader of 3 bilateral international collaborations and participation to 5 international programs.
- Leader of 6 national collaboration programs (including 2 ANR and one FUI) and participation to 4 other programs (ANR, ACI, AS).

Encadrements

22 PhD.

The thesis of J.F. Aujol obtained the Award of the Signal-Image-Vision French Thesis prize (Club EEA, GRETSI, GdR ISIS) in 2005.

Becoming of former PhD students: 3 were hired as researchers at CNRS, one is researcher at LCPC, 6 were hired in large French companies (TAS, General Electric, Philips, Amadeus), some others were hired at university or in startup.

2 PhD in progress.

Supervision of 4 post-doctorates et 38 M.Sc. internships.

Teaching and educational activities

Summer schools

- School ISIS/GretsI (major French image and signal processing summer school): Porquerolles May 2010 and Peyresq July 2009.
- Interdisciplinary school in Functional Microscopy in BIOlogy (MIFOBIO) Carqueiranne, sept. 2008.
- Summer school: Mathematical methods for multi-channel image processing, Beijing, Chine, 2006.
- Spring school of French Optics Society (SFO): Imagery and information, Les Houches, 2004.
- School of GDR Physics of the interior of stars, September 1997.

Organization of the annual summer school Peyresq: major French image and signal processing summer school (GRETSI -GdR ISIS) from 2006 to 2012.

University and superior school teaching

Around 60 hours teaching per year, in image processing, mathematics for imaging, M. Sc. Degree.