Bruno Després
Resume

January 1, 2020

Bruno Després,
born 31/07/1965,
married, 4 children,
born: 31/07/1965 at Baden-Baden (Germany)
address: 19, rue Docteur Siffre, 77930, eErthes, France

Prof. Applied Mathematics, Exceptional class
Laboratory Jacques-Louis Lions
Sorbonne University
4 place Jussieu 75252 Paris
despres@ann.jussieu.fr

- Starting 2018: member of the Editorial Board

  of the journal "Mathematics of Computation" and

  of the journal "Numerical Algorithms".

- IUF Senior member (2016 to 2021)

- First semester 2015: first CNRS delegation (on leave from teaching).

- September 2009 (and ongoing): scientific advisor at CEA.

- September 2009: integration as a full time professor in Applied Math. and Numerical Analysis at the Paris VI university.

- From 2001 to 2009: professor in Applied Mathematics at Ecole Polytechnique (France).

- 2005: Research fellow at CEA.

- 2004 to September 2009: back at CEA.

- July 2003 and May 2005: two one month scientific visits at CNLS (Center for Non Linear Studies) au Los Alamos Nat. Lab., USA.

- 2001 to 2004: Associate professor full-time (PAST) at Paris VI university, on leave from CEA. At the same time scientific adviser at CEA.

- 1998 to 2001: Associate professor part-time (PAST) at Paris VI university.

- 1992: researcher at the CEA (French Atomic Agency).

- 1991: PhD, on Domain Decomposition methods for time harmonic waves equations.

Scientific interests

My scientific interests were initially motivated by the mathematical and numerical analysis of wave equations, mainly time harmonic. It was motivated by the still not fully unanswered need of all-purposes-and-high-frequency numerical solvers for such equations, including DDM for Helmholtz and Maxwell equatins and UWVF. In 1998, I turned to non linear hyperbolic equations in plasma physics and CFD (Computational Fluid Dynamics), in order to address scientific computing issues for compressible fluids and plasmas, both Eulerian and Lagrangian.

Nowadays I consider the activity on magnetic plasmas as a fantastic opportunity to address in a unified framework all these problems: indeed a magnetic plasma in a huge magnetic field strongly couples electromagnetic effects with kinetic and fluid effects.

In all these fields, good models and efficient numerical methods are of paramount importance.