



EUROMECH-ETC17 YOUNG SCIENTIST AWARDS

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Abstract n. 390 Title: Transition to the ultimate regime in a radiatively driven convection experiment.

Brief CV

2018-2023 PI of the ERC starting grant FLAVE on “the energetics of natural turbulent flows: impact of waves and radiation”.

July 2016 Distinguished Scholar Award from the Geophysical Fluid Dynamics program, Woods Hole Oceanographic Institution.

2014 Permanent researcher at « Service de Physique de l’Etat Condensé », CEA Saclay, France.

2013 Post-doctoral research on experimental rotating turbulence at FAST, Orsay, France, with F. Moisy and P. Cortet.

2012 Post-doctoral fellow of the Scripps Institution of Oceanography, La Jolla, CA, USA, with W.R. Young.

2008-2011 PhD at Ecole Normale Supérieure, Paris, on the “instability of a large-scale field generated over a turbulent background”, under supervision of S. Fauve and F. Pétrélis.

2004-2008 Student at Ecole Normale Supérieure de Paris, France, rank 1st.

Up to three publications

1. “Radiative Heating achieves the ultimate regime of thermal convection”, S. Lepot, S. Aumaître, **B. Gallet**, PNAS, 115, 36 (2018).
2. “Transition to the ultimate regime in a radiatively driven convection experiment”, V. Bouillaut, S. Lepot, S. Aumaître, **B. Gallet**, J. Fluid Mech., 861, R5 (2019).
3. “Exact two-dimensionalization of rapidly rotating large-Reynolds-number flows”, **B. Gallet**, J. Fluid Mech., 783, 412-447.