

Franck Boyer

Short bio:

F. Boyer received his PhD in applied mathematics from the University of Bordeaux in 2001. From 2001 to 2007, he was junior CNRS researcher at the Mathematics Institute in Marseille where he became full professor in 2007. In 2015, he moves to the Mathematics Institute in Toulouse. His main research interests concern the theoretical and numerical analysis of Partial Differential Equations, with a particular focus on questions coming from control theory of PDEs.

Short abstract of the Course: “Numerical analysis of inverse problems for PDEs”

In this 3h long lecture, I will discuss questions around the controllability of parabolic equations and associated numerical analysis issues. After introducing the framework, I will try to answer questions like: if a given PDE is controllable, is it true that any given discretization of this PDE is also controllable, uniformly with respect to the discretization parameters? If it is the case, can I use this property to build a suitable approximation of the control for the original problem? If it is not the case, how can we still get reasonable approximations of the control I'm looking at?