Workshop on numerical approximations of PDEs. Honoring the 60th birthday of Frédéric Hecht. Málaga, April 20-22, 2015

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"Adding user interactivity to FreeFem++ with EJS: From teaching to research"

Abstract

In this talk we propose the use of an authoring tool, Easy Java Simulations, to build interactive simulations for pdes where the computing kernel is FreeFem++. This tool allows to play with all the parameters of the pde problem at will, mesh size, pde terms, boundary conditions, etc... and creates applets for the student to play and learn in real time on the influence of these parameters on the solution of the pde