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SEMINAR OF NUMERICAL ANALYSIS

WEDNESDAY 18 NOVEMBER 2015 - ROOM MA A1 10 - 16h15

Prof. Remi ABGRALL (University of Zürich) will present a seminar entitled:

"Remove the mass matrix from finite element calculation of convetion dominated transport equations"

Abstract:

We are interested in the numerical approximation of convection dominated problems. This talk will concentrate on the scalar case.

It is well known that, using finite elements, a mass matrix appears in the formulation. Most numerical methods need to invert it, and this can be a problem. In this talk, we show how to reformulate the problem in such a way that there is no need to invert any mass matrix, even for continuous finite elements.

Lausanne, 7 October 2015/JH/cr