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Einladung

Im Rahmen des Oberseminars hält

Professor Laurence Halpern, University Paris 13

am Montag, den 29. April 2019, einen Vortrag zum Thema:

Optimized Schwarz methods for complex elliptic problems

Der Vortrag findet um 10:15 Uhr in Raum M627 statt. Alle Interessenten sind herzlich eingeladen.

Abstract:

The Schwarz method (Schwarz, 1872) is an overlapping domain decomposition algorithm whose properties are now well-known and widely used in the context of parallel computations. But the convergence of low frequency components deteriorates with the size of the overlap.
Optimized Schwarz methods have been developed in the last twenty years, which improve drastically the convergence of the method. They involved transmission conditions at the interfaces of Robin type. The Robin coefficient is solution of a best approximation problem, which has been solved in various cases, when the search reduces to a somewhat real problem. We present here a study of a really complex problem, arising in many applications, like the control of elliptic problems or the solution of waves in conductive bodies.

(invited by Gabriele Ciaramella)