ISTITUTO DI MATEMATICA APPLICATA E TECNOLOGIE INFORMATICHE (CNR)
DIPARTIMENTO DI MATEMATICA "FELICE CASORATI"
via Ferrata,1 – 27100 Pavia (Italia)

Seminario di Matematica Applicata

Martedì 4 Novembre alle ore 16 a Pavia, nella Sala Conferenze dell'IMATI-CNR (ex IAN), il

Prof. Stefan Sauter
(Universität Zürich)

terrà la conferenza:

Lattice equations

Abstract. In this talk, a new numerical approach for solving high-dimensional lattice equations will be introduced. We will present the so-called recovery method, to define a bilinear form on the continuous level which has equivalent energy as the original lattice equation. The finite element discretisation of the continuous bilinear form will lead to a stiffness matrix which serves as a quasi-optimal preconditioner for the lattice equations. Since a large variety of efficient solvers are available for linear finite element problems the new recovery method allows to apply these solvers for unstructured lattice problems. This talk comprises joint work with Ivo Babuska.

La S.V. è cordialmente invitata.

☕ Dopo la conferenza sarà organizzato un breve rinfresco ☕