



Universität Stuttgart



Kolloquium des Fachbereichs Mathematik

Es spricht am Montag, 14. November 2022 um 17:00 Uhr

Frau Professorin Laura Grigori

(INRIA Paris)

zum Thema: „**Randomization techniques for solving large scale linear algebra problems**“

Abstract:

In this talk we discuss randomization techniques for solving large scale linear algebra problems. We focus in particular on solving linear systems of equations and We first introduce a randomized Gram-Schmidt process for orthogonalizing a set of vectors and its block version. We discuss its efficiency and its numerical stability while also using mixed precision. Further randomized GMRES and randomized FOM methods are discussed for solving linear systems of equations as well as randomized Rayleigh-Ritz procedure for solving eigenvalue problems.

Der Vortrag findet online per Webex statt. Wir bitten Sie, vor Beitritt ihr Mikrofon auszuschalten, um den Vortrag nicht zu stören.

<https://unistuttgart.webex.com/unistuttgart/j.php?MTID=ma40e981e01ca7da260c39c87d91f7233>

Die Dozentinnen und Dozenten des Fachbereichs Mathematik