Einladung zum

Würzburger Mathematischen Kolloquium

Julius-Maximilians-Universität Würzburg • Fakultät für Mathematik und Informatik

Komla Domelevo

Université Paul Sabatier, Toulouse, France

From numerical to harmonic analysis, and back

Mittwoch, 2. August 2017 • 9:30 Uhr

Raum SE 40, Mathematik Ost, Emil-Fischer-Str. 40, Campus Hubland-Nord

Inhaltsangabe:

Numerical methods for the discretisation of partial differential equations have been used and developed for decades. When complex geometries, varying coefficients or conservation properties are involved one often needs to abandon the simple finite difference techniques. One possible route is the use of the Discrete Duality Finite Volume (DDFV) technique introduced by P.Omnés and myself more than a decade ago. I will explain this strategy. An apparently completely different topic is the study of L^p estimates for subordinate martingales. I will present some results in that direction that use modern techniques of harmonic analysis. I will finally explain how these results are connected to questions in numerical analysis, discrete differential geometry or discrete analytic functions.

Zu diesem Vortrag laden wir Sie herzlich ein.

Die Dozentinnen und Dozenten der Mathematik