

Report on the mini-symposium

Applied harmonic analysis: when theory meets practice

Organized by Wolfgang Erb, University of Padova

Event: Workshop on Mathematical Signal and Image Analysis

Date of the mini-symposium: 1.04.2019

Location: TUM Science and Study Center Raitenhaslach (near Burghausen, Germany)

Purpose of the mini-symposium: Goal of this mini-symposium is to bring together experts in the field of harmonic analysis and approximation theory to present and discuss emerging trends in applied harmonic analysis and its applications. Hereby, a special focus is given to efficient algorithms for the analysis, decomposition and approximation of multivariate, high-dimensional data and their applicability in practice. Particularly interesting for this mini-symposium are discussions about industrial applications of these algorithms.

Special occasion: This mini-symposium is organized in honor of Frank Filbir's 60th birthday.

List of speakers and presentations at the mini-symposium on 1.04.2019

16:00-18:00 **Mini-symposium: Applied harmonic analysis: when theory meets practice**

16:00-16:25 Wolfgang Erb

Spectral interpolation in spherical and polar coordinates

16:30-16:55 Dominik Schmid

Scattered data approximation in an industrial application

17:00-17:25 Daniel Potts

Transformed Rank-1 Lattices for high-dimensional approximation

17:30-17:55 Jürgen Prestin

Directional wavelets and detection of singularities