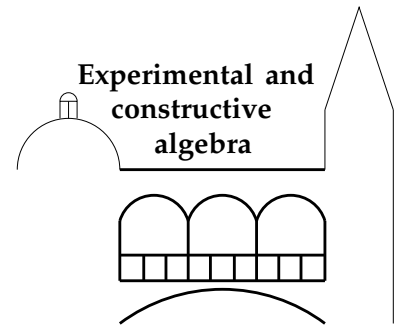Graduiertenkolleg

Experimentelle und konstruktive Algebra

Kolloquiumsvortrag

Dienstag, 2. Juli 2019, 14:15 Uhr, Hörsaal III (Hauptgebäude Raum 1010|107)

Narjes Rashidi (Lehrstuhl A für Mathematik):
Reproducing Subgroups of Affine Weyl-Heisenberg groups

We consider a class of subgroups of the semidirect product of the Heisenberg group and the general linear group $G = \mathbb{H}^n \rtimes \mathrm{GL}(n, \mathbb{R})$ of the type $\mathbb{T} \times \mathbb{R}^n \times V \rtimes H$, where V is subspace of $\mathbb{R}^n$. This class of subgroups contains standard wavelet transforms as well as windowed wavelet transforms, of Weyl-Heisenberg group. We consider the construction of the continuous wavelet transforms on these subgroups, with the unitary representation $\pi(x, \xi, h, z) = z T_x M_\xi D_h$.
We then give a sharp admissibility criteria for a pair (V, H) that have an admissible vector.
Finally, we provide a new examples of reproducing subgroups of the type $\mathbb{T} \times \mathbb{R}^n \times V \rtimes H$ in high dimensions.

Wir laden alle Interessierten herzlich ein.