Department of Mathematics

University of Houston

Analysis Seminar

FRIDAY, October 06, 2017

11:00-12:00 - Room 646 PGH

Speaker: Emily King (University of Bremen, Germany)

Title: Frames and Bases over Locally Compact Abelian Groups

Abstract: Most generalizations of results from harmonic analysis over the reals to results over locally compact abelian groups assume that the groups in question contain a lattice; however, this is often not the case. The additive group of the *p*-adic numbers is one such example. In this talk, constructions of *p*-adic wavelets will be introduced. Interestingly, unlike in the real case, there is only one possible multiresolution analysis structure that one can associate with *p*-adic vector spaces, even though there are infinitely many possible (biorthogonal) wavelet bases arising from the given MRA structure. In the second half of the talk, time-frequency analysis over LCAG without a lattice will be addressed. Very new results concerning Buerling density will be presented.