Alina Vdovina

Higher structures in Algebra, Geometry and C*-algebras

We present buildings as universal covers of certain infinite families of CW-complexes of arbitrary dimension. We will show several different constructions of new families of k-rank graphs and C*-algebras based on these complexes, for arbitrary k. The underlying building structure allows explicit computation of the K-theory as well as the explicit spectra computation for the k-graphs.