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Keeping Hilbert below \aleph_0

Joint work with K. Ago, M. Maksimović and M. Šobot

We consider finite models of Hilbert's axioms of incidence. We present some classes of models, revealing some connections with projective geometries and combinatorial designs. We also calculate the exact number of such (non-isomorphic) models with n points for n up to 12, for which we employ some theory on matroids and some CPU time.