

The algebra of Steiner systems

Bob Quackenbush

Abstract. A Steiner k -system (P, B) is a set of points P and a set of blocks $B \subseteq \mathfrak{P}_k(P)$ (the set of k -element subsets of P). This talk is about representing Steiner k -systems by equational classes of algebras. This can be done for k being a prime power q and for k being one more than a prime power q .