

# Designs from maximal subgroups and conjugacy classes of finite simple groups

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Let  $G$  be a finite simple group,  $M$  be a maximal subgroup of  $G$  and  $C_g$  be the conjugacy class of  $G$  containing  $g$ . In this talk we outline a new method for constructing  $1 - (v, k, \lambda)$  designs  $D = (\mathcal{P}, \mathcal{B})$ , where  $\mathcal{P} = C_g$  and  $\mathcal{B}$  is the set of all conjugates of  $M$ . The parameters  $v, k, \lambda$  and further properties of  $D$  are determined.