

The file "Eliminated cases" contains **four lists** with the entries of the form

$$[[v, k, \lambda], nr].$$

By such an entry the following "case" under consideration is designated: an action of the primitive permutation group  $G(v, nr)$  on a  $(v, k, \lambda)$  symmetric design.  $G(v, nr)$  is the unique group in the position  $nr$  in the list of groups of degree  $v$  contained in the GAP library of primitive permutation groups,  $v \in \{1, \dots, 2500\}$ .

1<sup>0</sup>) The list "**cases**" records all possible "cases" with  $v$  not a prime power. This list contains 4745 elements.

2<sup>0</sup>) The list "**ranktwo**" records all the cases with  $G(v, nr)$  of rank 2. This list contains 3119 elements.

3<sup>0</sup>) The list "**fixedpoints**" records the cases eliminated through applying Proposition 2.1 and Proposition 2.2, i.e. the bounds for the fixed points number of a nontrivial design automorphism. The list contains 541 elements. The underlying groups  $G(v, nr)$  are not of rank 2.

4<sup>0</sup>) The list "**orbits**" records the cases eliminated through applying Theorem 2.3, i.e. through the size of orbits of automorphism groups. The list contains 271 elements. The underlying groups  $G(v, nr)$  are not of rank 2.

The lists can be used within GAP directly.