

## Vertices of simple modules

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Every indecomposable module  $M$  of a finite group  $G$  over a field  $F$  of characteristic  $p > 0$  determines a conjugacy class of  $p$ -subgroups  $Q$  of  $G$ , called the vertices of  $M$ . When  $M$  is simple then, by a theorem of Knörr,  $Q$  contains the center of a defect group of the block of  $G$  defined by  $M$ . There are a number of open questions on vertices of simple modules in the literature. In the talk we will answer some of them, correct a mistake and prove some new results.