

## Constructing $d$ -Handicap Tournaments

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A regular  $d$ -handicap tournament,  $H(n, k, d)$  is an incomplete tournament in which  $n$  teams play  $k < n - 1$  teams each and the strength of schedule of the  $i^{\text{th}}$  ranked team is  $d$  more than the  $(i + 1)^{\text{st}}$  ranked team. That is, strength of schedules of the teams increases arithmetically with strength of the team. The corresponding  $k$ -regular graph, we call a  $d$ -handicap graph. In this talk, we address the spectrum for  $n, k$ , and  $d$  and construct large classes of  $d$ -handicap tournaments for every  $d \geq 1$ .

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