

Longest cycles in $K_{1,r}$ -free graphs

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(joint work with Shenggui Zhang)

In this talk, we give some kinds of graphs such that every longest of the graph contains all the vertices with degree at least a given lower bound. Specifically, let G be a 2-connected graph on n vertices, and α be a real number, $0 \leq \alpha \leq 1$. we characterize the graph R such that G being R -free (containing no copies of induced R) implies that every longest cycle of G passes through all the vertices with degree at least $\alpha n + O(1)$ in G .