**BODE MICHEL**, Otto-von-Guericke-Universität Magdeburg Good edge labelings of graphs of average degree at most 3

An edge labeling of a graph is called good, if for every ordered pair of distinct vertices (u,v) there is at most one nondecreasing path from u to v. Araújo, Cohen, Giroire and Havet conjecture that every  $K_3$ - and  $K_{2,3}$ -free graph of average degree  $\leq 3$  has a good labeling. This talk reports on progress towards this conjecture. In particular, a proof is given for the special case when the girth is at least 5.