Graphs with given maximum degree and smallest possible matching number

Michael A. $Henning^{(1)}$

⁽¹⁾ Department of Mathematics and Applied Mathematics University of Johannesburg Auckland Park, 2006 South Africa

In this talk, we present tight lower bounds on the matching number of a graph with given maximum degree in terms of its order and size, and we characterize the graphs achieving equality in these bounds. We also discuss tight lower bounds on the matching number of a graph with given maximum degree and edge-connectivity in terms of its order and size.