

28TH WORKSHOP '3IN1' 2019 DOSŁOŃCE, POLAND NOVEMBER 21-23, 2019

ASYMMETRIC COLOURINGS OF GRAPHS WITH BOUNDED MAXIMAL DEGREE

FLORIAN LEHNER¹ (JOINT WORK WITH MONIKA PILŚNIAK² AND MARCIN STAWISKI²) 1. Graz University of Technology, Graz, Austria 2. AGH University of Science and Technology, Kraków, Poland

Call a colouring of a graph G asymmetric, if the only colour preserving automorphism is the identity. A conjecture of Tucker states that if every automorphism of G moves infinitely many vertices, then there is a asymmetric 2-colouring. In this talk, we discuss progress on this conjecture in the case where G has finite maximum degree.