

Speaker: Stefan Glock

Title: Rainbow Spanning Tree Decompositions

Abstract: A subgraph of an edge-coloured graph is called rainbow if all its edges have distinct colours. We present our recent result that, given any optimal colouring of a sufficiently large complete graph K_{2n} , there exists a decomposition of K_{2n} into isomorphic rainbow spanning trees. This settles conjectures of Brualdi–Hollingsworth (from 1996) and Constantine (from 2002) for large graphs. Joint work with Daniela Kühn, Richard Montgomery and Deryk Osthus.