Embedding rainbow trees

A subgraph of an edge-coloured graph is called rainbow if all its edges have distinct colours. The study of rainbow subgraphs goes back to the work of Euler on Latin squares. This talk will be about proving that every properly edge-coloured complete graph has a rainbow copy of every nearly spanning tree. Particular emphasis will be placed on how to embed trees of unbounded degrees. We will also discuss applications of this result to several problems in graph theory. In particular that conjectures of Ringel and Graham-Sloane hold asymptotically. This is joint work with Richard Montgomery and Benny Sudakov.