# Relaxed Graceful Labellings of Trees

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In this talk we discuss relaxed graceful labellings of trees as a way of making progress towards the famous Graceful Tree Conjecture. In particular, we study vertex relaxed alpha-labellings on trees with maximum degree 3. The only such trees known not to have alpha-labellings are those identified by Huang, Kotzig and Rosa, which are obtained by edge subdivision of trees with the number of vertices divisible by 4, and degrees 1 and 3.

In this talk we presents new bounds on the vertex relaxed alpha-labellings of trees with maximum degree 3 and show how these bounds can be improved as new computer search results become available.

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