

---

**KATHERINE STADEN**, University of Oxford

*Ringel's tree packing conjecture*

The graph decomposition (or packing) problem asks when the edge set of a host graph can be decomposed into copies of a given guest graph. I will present the following theorem on tree decomposition (joint work with Peter Keevash): given any tree  $T$  with  $r$  edges, any dense quasirandom graph  $G$  with  $n$  vertices and  $rn$  edges can be decomposed into  $n$  copies of  $T$ . The special case when  $G$  is the complete graph is Ringel's tree packing conjecture from 1963. An independent proof of the original conjecture was also obtained by Montgomery, Pokrovskiy and Sudakov.