
THOMAS WOLF, Brock University

TurboKnots

The package TurboKnots started as a tool box for working with knot diagrams to generate random knots, simplify diagrams by performing 'beneficial' Reidemeister moves, extracting prime knots that may overlap, performing flype moves and pass moves that reduce or preserve the number of crossings and by compactifying diagrams. Knots with up to 15 crossings can be identified instantly. The talk will mention coloring and unknotting computations of all knots with up to 15 crossings and comment on the efficiency of its HOMFLYPT polynomial computations.