

1108-57-466

Nicholas Troy Zufelt* (nzufelt@math.utexas.edu). *The combinatorics of reducible Dehn surgeries*. Preliminary report.

We use the combinatorial techniques of graphs of intersection to study reducible Dehn surgeries on knots in the three-sphere. In particular, in the event that such a reducible surgery produces a manifold with more than two connected summands, we show that the surgery coefficient is bounded above by the bridge number of the knot. As a consequence, this possibility is ruled out for knots with bridge number less than six and for positive braid closures. (Received January 19, 2015)