

Speaker: Laura Wakelin (King's College)

**Title:** Dehn surgery functions are never injective.

**Abstract:** For any fixed rational number  $p/q$ , Dehn surgery gives a map from the set of knots in the 3-sphere to the set of closed orientable 3-manifolds. In 1978, Gordon conjectured that these maps are never injective. I will discuss recent joint work with Kyle Hayden and Lisa Piccirillo in which we prove this conjecture using framed surgery duals and the zeroth HOMFLY polynomial.