OBSTRUCTING COSMETIC CROSSING CHANGES

JOE BONINGER

ABSTRACT. The cosmetic crossing conjecture posits that switching a non-trivial crossing in a knot diagram always changes the knot type. This question is closely related to cosmetic surgery problems for three-manifolds, and has seen significant progress in recent years. We will discuss the conjecture, and present obstructions to cosmetic crossing changes for a family of links that includes all alternating knots.