

1176-57-10

Konstantinos Varvarezos* (kkv@math.princeton.edu), Department of Mathematics,
Princeton University, Fine Hall, Washington Rd, Princeton, NJ 08544. *Heegaard Floer homology
and chirally cosmetic surgeries.*

A pair of surgeries on a knot is chirally cosmetic if they result in homeomorphic manifolds with opposite orientations. We find new obstructions to the existence of such surgeries coming from Heegaard Floer homology; in particular, we make use of the immersed curve formulation of Hanselman, Rasmussen, and Watson. As an application, we completely classify chirally cosmetic surgeries on odd alternating pretzel knots, and we rule out cosmetic surgeries for L-space knots along slopes with opposite signs. (Received December 16, 2021)