1107-57-320Christopher R Cornwell, Lenhard Ng and Steven Sivek*, Fine Hall, Washington Road,
Princeton, NJ 08544-1000. Obstructions to Lagrangian concordance.

We investigate the question of the existence of a Lagrangian concordance between two Legendrian knots in \mathbb{R}^3 . In the case of a concordance from a knot K to the standard Legendrian unknot, we use normal rulings to provide obstructions which can be expressed in terms of the HOMFLY and Kauffman polynomials of K and its cables and thus depend only on the smooth knot type of K. As a consequence, we construct non-reversible Lagrangian concordances from the standard Legendrian unknot to infinitely many other knots. (Received January 18, 2015)