

1151-57-195

Caitlin Levenson* (leverson@math.gatech.edu) and **Dan Rutherford**. *Ruling Polynomials and the Colored HOMFLY-PT Polynomial.*

Given a Legendrian knot Λ in \mathbb{R}^3 with the standard contact structure, Rutherford showed that the ruling polynomial of Λ appears as a specialization of the HOMFLY-PT polynomial of its topological knot type. We will extend the definition of the ruling polynomial to define the colored ruling polynomial of a Legendrian knot, analogously to how the definition of the colored HOMFLY-PT polynomial is an extension of the HOMFLY-PT polynomial, and show that the colored ruling polynomial of Λ also appears as a specialization of the colored HOMFLY-PT polynomial of Λ 's topological knot type. (Joint work with Dan Rutherford.) (Received August 18, 2019)