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Efstratia Kalfagianni and **Christine Ruey Shan Lee***, crslee@southalabama.edu. *Crossing numbers of Whitehead doubles.*

Determining the minimal crossing number of a knot is typically a difficult problem. In particular, not much is known about the behavior of crossing numbers under the operation of taking Whitehead doubles. In this talk, we will discuss how the colored Jones polynomial can be used to study the crossing numbers of Whitehead doubles. We use the connection between the asymptotics of the degrees of the colored Jones polynomial and crossing numbers to determine the minimum crossing numbers of an infinite family of satellite knots. This is joint work with Efstratia Kalfagianni. (Received August 07, 2021)