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Samantha Pezzimenti* (spezziment@brynmawr.edu), Bryn Mawr College. *Immersed Lagrangian Fillings of Legendrian Knots*

A classic question in knot theory is: Given a smooth knot in the 3-sphere, what surfaces in the 4-ball can it bound? A version of this question can also be asked about Legendrian knots, which are smooth knots that satisfy an additional geometric condition imposed by a contact structure. The natural question is now: Given a *Legendrian* knot in the 3-sphere, what *Lagrangian* surfaces in the 4-ball can it bound? Whereas a smooth knot can always be filled by an infinite number of topologically distinct surfaces, the Seidel Isomorphism says that a Legendrian knot polynomial determines the genus of any embedded Lagrangian filling. I will describe how this polynomial also gives restrictions on immersed Lagrangian fillings.

Is this a preliminary report? Y or N (Received October 06, 2017)