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Feride Ceren Kose* (fkose@math.utexas.edu), The University of Texas at Austin, 2515
Speedway PMA 8.100, Austin, TX 78712. *Symmetric Unions and Reducible Fillings.*

Recently, Tanaka and I, independently, classified composite symmetric unions with minimal twisting number one. I will describe the set up and ideas that go into my proof, which involves classical results in 3-manifold topology, in particular, a theorem of Gordon and Luecke on reducible fillings. Their theorem relies on studying graphs of surface intersections. I will then discuss how to use this technique to study composite symmetric unions and state results regarding those with minimal twisting number two. This is a work in progress. (Received January 19, 2021)