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**Claire C. Zajaczkowski\***, cczajacz@ncsu.edu. *Surgery Obstructions for Seifert Fibered Integral Homology Spheres.*

We examine surgery on a knot in  $S^3$  to determine surgery obstructions to Seifert fibered integral homology spheres. Dehn surgery is one of our key ways of understanding 3-manifolds, and Seifert fibered integral homology spheres are a class of manifolds we understand well. Thus it is a well explored topic to find such surgery obstructions. In this talk we will find such surgery obstructions using Heegaard Floer and Knot Floer homology, which has been a commonly used approach in the past. Here however, we take a different approach and use the number of singular fibers of a Seifert fibered integral homology sphere to find obstructions, which is the toroidal structure. This approach led us to some significant and new results by looking at the genus of the knot and the number of singular fibers. (Received September 22, 2018)