1145-57-1472 Wenzhao Chen* (chenwenz@msu.edu). A lower bound for the double slice genus.

Given a knot in the 3-sphere, its double slice genus is the minimal genus of unknotted surfaces in the 4-sphere that contain the knot as a cross-section. Obviously twice the slice genus is a lower bound for the double slice genus. One really basic question is whether the double slice genus can be arbitrarily large compared to twice the slice genus. In this talk I will introduce a lower bound that can be used to answer this question. (Received September 22, 2018)