1161-05-118 Chun-Hung Liu* (chliu@math.tamu.edu). Immersion and clustered coloring.

Hadwiger and Hajós conjectured that for every positive integer t, K_{t+1} -minor free graphs and K_{t+1} -topological minor free graphs are properly t-colorable, respectively. Clustered coloring version of these two conjectures which only require monochromatic components to have bounded size has been extensively studied. In this talk we consider the clustered coloring version of the immersion-variant of Hadwiger's and Hajós' conjecture proposed by Lescure and Meyniel and independently by Abu-Khzam and Langston. We determine the minimum number of required colors for H-immersion free graphs, for any fixed graph H, up to a small additive absolute constant. Our result is tight for infinitely many graphs H. (Received August 14, 2020)