

1154-VU-2595 **Marion Campisi** and **Luis Torres*** (luis.torres@sjsu.edu). *The disk complex and topologically minimal surfaces in the 3-sphere*. Preliminary report.

David Bachman introduced topologically minimal surfaces as generalizations of incompressible and strongly irreducible surfaces. These surfaces have been useful in problems that deal with stabilization, amalgamation, and isotopy of Heegaard splittings and bridge spheres for knots. In this talk, we discuss joint work with Marion Campisi which shows that the disk complex of a compact, orientable surface in the 3-sphere is homotopy equivalent to a wedge of spheres, all of the same dimension. This leads to a proof that genus $g > 1$ Heegaard surfaces of the 3-sphere are topologically minimal with index $2g - 1$. (Received September 17, 2019)