1125-53-175 **Bahar Acu*** (bacu@usc.edu), 3620 S Vermont Ave KAP 104, Los Angeles, CA 90089-2532. On Fillability of Higher Dimensional Contact Manifolds and Their Symplectic Mapping Class Group Relations.

In this talk, we will examine filling properties of higher dimensional contact manifolds and show that the symplectization of a (2n1)-dimensional contact manifold given by an iterated planar open book decomposition, which will be defined in the talk, can be foliated by a special class of planar curves. We will also examine symplectomorphisms of higher dimensional symplectic manifolds yielding a generalization of the classical chain relation on surfaces. The second part of the talk is joint work with Russell Avdek. (Received September 20, 2016)