1125-57-509 Caitlin Leverson* (leverson@math.gatech.edu). Invariants of Legendrian Links.

Given a plane field dz - xdy in \mathbb{R}^3 . A Legendrian knot is a knot which at every point is tangent to the plane at that point. One can similarly define a Legendrian knot in any contact 3-manifold (manifold with a plane field satisfying some conditions). In this talk, we will explore Legendrian knots in \mathbb{R}^3 , $J^1(S^1)$, and $\#^k(S^1 \times S^2)$ as well as a few Legendrian knot invariants. We will also look at the relationships between a few of these knot invariants. No knowledge of Legendrian knots will be assumed though some knowledge of basic knot theory would be useful. (Received September 04, 2016)