

1116-58-472

Scott Zimmerman* (srz5@pitt.edu), Department of Mathematics, University of Pittsburgh, 301 Thackeray Hall, Pittsburgh, PA 15260. *The Whitney Extension Theorem for C^1 , horizontal curves in \mathbb{H}^n .*

For a real valued function defined on a compact set $K \subset \mathbb{R}^m$, the classical Whitney Extension Theorem from 1934 gives necessary and sufficient conditions for the existence of a C^k extension to \mathbb{R}^m . In this talk, we will see a version of the Whitney Extension Theorem in the case of C^1 , horizontal extensions for mappings defined on compact subsets of \mathbb{R} taking values in the Heisenberg Group \mathbb{H}^n . (Received September 03, 2015)