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Gareth Speight* (gareth.speight@uc.edu). *A C^m Whitney Extension Theorem for Horizontal Curves in the Heisenberg Group.*

The classical Whitney extension theorem characterizes when a mapping from a compact subset K of \mathbb{R}^p can be extended to a C^m mapping from \mathbb{R}^p to \mathbb{R}^q with prescribed derivatives. The Heisenberg group is \mathbb{R}^3 equipped with a non-commutative group law and distance arising from lengths of special horizontal curves. We describe a Whitney extension theorem for mappings into the Heisenberg group, where we require all mappings to respect the horizontal structure.

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