1147-28-582 **Silvia Ghinassi***, silvia.ghinassi@stonybrook.edu. *Higher order rectifiability via Reifenberg theorems for sets and measures.*

Given a one-sided Reifenberg flat set in $\mathbb{R}^n$ we provide geometric sufficient conditions for the set to be parametrized by a $C^{1,\alpha}$ map. We use these results to prove sufficient conditions for higher order rectifiability of sets and measures in $\mathbb{R}^n$. Key tools for the proof come from Guy David and Tatiana Toro's parametrization of Reifenberg flat sets (with holes) in the Hölder and Lipschitz categories. (Received January 26, 2019)