

1139-28-236

Silvia Ghinassi* (ghinassi@math.stonybrook.edu). *Sufficient conditions for $C^{1,\alpha}$ parametrization and rectifiability.*

We provide sufficient conditions for a set or measure in \mathbb{R}^n to be $C^{1,\alpha}$ d -rectifiable, with $\alpha \in [0, 1]$. The conditions use a Bishop-Jones type square function and all statements are quantitative in that the $C^{1,\alpha}$ constants depend on such a function. 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 February 12, 2018)