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**Speaker:** Daniele Valtorta  
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Thursday, October 15, 2015

10:30 AM

258 Hurley Hall

**Title:** Volume bounds on the nodal sets of solutions to elliptic PDEs

**Abstract:**

We discuss uniform volume bounds for the nodal sets of solutions to a very general class of elliptic PDEs. In particular, using an improved quantitative stratification, we prove uniform  $n-1$  Minkowski estimates for the nodal sets. Similar estimates hold for the critical sets. We will focus on the main ideas behind the techniques involved, in particular the quantitative stratification and its improvements, and mention some other of their applications. This is a joint work with prof. Aaron Naber.