

1135-51-1426

**Nick Edelen\*** (nedelen@mit.edu), **Luca Spolaor** and **Maria Colombo**. *The singular set of minimal surfaces near polyhedral cones.*

We adapt the method of Simon to prove a  $C^{1,\alpha}$ -regularity theorem for minimal varifolds which resemble a cone  $C_0^2$  over an equiangular geodesic net. For varifold classes admitting a “no-hole” condition on the singular set, we additionally establish  $C^{1,\alpha}$ -regularity near the cone  $C_0^2 \times R^m$ . Combined with work of Allard, Simon, Taylor, and Naber-Valtorta, our result implies a  $C^{1,\alpha}$ -structure for the top three strata of minimizing clusters and size-minimizing currents, and a Lipschitz structure on the  $(n - 3)$ -stratum. This is joint work with Maria Colombo and Luca Spolaor. (Received September 22, 2017)