Travel funding for Ethan Schaefer [1]

Spring 2016 Graduate Student News

Travel funding for Ethan Schaefer
Sixth-year graduate student **Ethan Schaefer** (advised by **Professor Alfred McEwen**) is the recipient of a $500 travel award courtesy of **Mr. Dan Cavanagh**, member of the LPL Advisory Board. Ethan will use the funds to support a field campaign to study lava flows in Hawaii. The study, advised by **Assistant Professor Christopher Hamilton**, will build on earlier field work to answer the question, "If all we can see in coarse, remotely-sensed data is the outline of a lava flow, what can we meaningfully infer, if anything, about that flow?" Ethan writes that this question has direct application to bodies such as Io and Venus. If Ethan's hypotheses are confirmed, he will have developed a fractal-based technique to infer both the extant and primary sub-meter roughness of a lava flow and estimate the degree of sediment mantling, if present, all from the flow's outline at resolutions at least as coarse as 100 m.