### DIFFERENTIAL GEOMETRY/PDE SEMINAR

## Wednesday, Februarry 8, 2017 Padelford C-36 4PM-5PM

# Some existence and non-existence results for Poincare-Einstein metrics

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I will begin with a brief overview of the existence question for conformally compact Einstein manifolds with prescribed conformal infinity. After stating the seminal result of Graham-Lee, I will discuss a non-existence result (joint with Qing Han) for certain conformal classes on the 7-dimensional sphere. If time permits, I will mention some ongoing work (with Gabor Szekelyhidi) on a version of "local existence" of Poincare-Einstein metrics.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link Seminars, Colloquia, and Conferences).

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