# SPECIAL MATHEMATICS COLLOQUIUM

## Richard Millman
## Georgia Institute of Technology

*"A Mixture of Completeness in the Space of Riemannian Geometries"*

## Monday, April 21, 2014

Talk at 4:00 – Park 338
Tea at 3:30 – Park 355, Math Lounge

**Abstract:**
    This talk shows that space and geometry can be thought of as trying to understand the geometry of the space of all geometries. A specific space can have many geometries which have different properties and we'll discuss two dimensional spaces (two of them). Riemann said in 1854 that a geometry on a space (or manifold) corresponds to a Riemannian metric (an inner product at each point of the space) and each is interesting in its own right. It makes sense, then, to ask what the set of all Riemannian metrics of a specific manifold might look like and how they change from one geometry to another. Linear algebra and calculus will be enough background.

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