

2015

# Riemannian Geometry (Abstract)

Chikako Mese

Follow this and additional works at: [http://ecommons.udayton.edu/mth\\_kcs](http://ecommons.udayton.edu/mth_kcs)



Part of the [Mathematics Commons](#)

---

## eCommons Citation

Mese, Chikako, "Riemannian Geometry (Abstract)" (2015). *Kenneth C. Schraut Memorial Lectures*. Paper 22.  
[http://ecommons.udayton.edu/mth\\_kcs/22](http://ecommons.udayton.edu/mth_kcs/22)

This Article is brought to you for free and open access by the Math Events at eCommons. It has been accepted for inclusion in Kenneth C. Schraut Memorial Lectures by an authorized administrator of eCommons. For more information, please contact [frice1@udayton.edu](mailto:frice1@udayton.edu), [mschlangen1@udayton.edu](mailto:mschlangen1@udayton.edu).

# The 16th Annual Kenneth C. Schraut Memorial Lecture

**SATURDAY, OCTOBER 7, 2015**



## Riemannian Geometry

**Chikako Mese, Ph.D.**

Johns Hopkins University

Riemannian Geometry studies the geometry of curved spaces. It originated with the ideas of the Bernhard Riemann in the 19th century extending Gaussian geometry, or the study of geometry of curves and surfaces contained in 3 dimensional Euclidean space. Riemann's revolutionary idea that curved spaces could be understood in higher dimensions altered the course of mathematics, and with it, of science and our view about our universe. In this talk, we introduce fundamental concepts in Riemannian Geometry. We discuss the notion of curvature and how it affects the geometry of a space and examine some important research in the field.