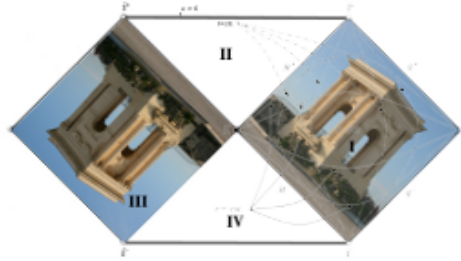


*Ecole Thématique*  
Aspects Géométriques de la Relativité  
Générale  
*Thematic School*  
Geometric Aspects of General  
Relativity



Contribution ID: 2

Type: **not specified**

## Introduction to the mathematical theory of black holes (lecture 1)

*Monday, September 28, 2015 1:15 PM (1 hour)*

In the lectures I plan to discuss the geometry of spherically symmetric black holes, that of the Kerr black hole, and of the Emperan-Reall black rings. Conformal and projection diagrams will be discussed, and some elements of the theory of uniqueness of stationary black holes will be presented.

The lectures will be based on selected chapters of the monograph “Geometry of black holes”, available at <http://homepage.univie.ac.at/piotr.chrusciel/teaching/Black%20Holes/BlackHolesViennaJanuary2015.pdf>

**Presenter:** CHRUSCIEL, Piotr (University of Vienna)