

# Graduate Seminar

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**Thursday, February 1, 2018  
1-2pm, HH-3017**

## **Initial value formulation of general relativity**

**Abstract:**

General relativity, the theory for the gravitation field, is governed by a set of 2nd order hyperbolic PDEs that determine the geometry of spacetime. After a short introduction to curvature, I will discuss the initial value formulation of the theory that describes the evolution of given initial data and explain why it is well-posed.

Finally I will discuss some open problems concerning the stability and long-term behaviour of initial data describing isolated systems.