universität wien
Fakultät für Mathematik

## Mathematisches Kolloquium

**Mittwoch, 29. Jänner 2020**
**Sky Lounge**

**EINLADUNG**

**Mihalis Dafermos**
*(Univ. Cambridge)*

**„Strong Cosmic Censorship versus Λ“**

## „Strong Cosmic Censorship versus Λ“

***Abstract:***
*The strong cosmic censorship conjecture is a fundamental open problem in classical general relativity, first put forth by Roger Penrose in the early 70s. This is essentially the question of whether general relativity is a deterministic theory. Perhaps the most exciting arena where the validity of the conjecture is challenged is the interior of rotating black holes, and there has been a lot of work in the past 50 years in identifying mechanisms ensuring that at least some formulation of the conjecture be true. It turns out that when a nonzero cosmological constant Λ is added to the Einstein equations, these underlying mechanisms change in an unexpected way, and the validity of the conjecture depends on a detailed understanding of subtle aspects of black hole scattering theory, surprisingly involving, in the case of negative Λ, some number theory. Does strong cosmic censorship survive the challenge of non-zero Λ? This talk will try to address this question!*

**15.45 Uhr: Kaffeejause**

**16.15 Uhr: Vortrag**

**vinum cum pane im Anschluss**

Roland Donninger
Christian Krattenthaler