



Wintersemester 2020/21

Oberseminar  
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am Donnerstag, den 10.12.2020 spricht um 10:00 per Videoübertragung

Prof. Dr. Julie Clutterbuck  
( Monash University )

über das Thema

**The fundamental gap in hyperbolic space**

For convex domains in flat space, the first two eigenvalues of the Laplacian operator cannot be close together—they are always separated by a constant dependent only on the diameter of the domain. This is also true for domains in the sphere. However, when we looked at the situation in hyperbolic space, we found that the gap can be arbitrarily small. Our explanation for this rests on the fact that in negatively curved spaces, even convex domains can have complicated shapes. This is joint work with T Bourni, XH Nguyen, A Stancu, G Wei, and V Wheeler.

**Hierzu wird herzlich eingeladen. Bei Interesse bitte per E-Mail an [angelika.spoerer-schmidle@uni-tuebingen.de](mailto:angelika.spoerer-schmidle@uni-tuebingen.de) wenden, um den Link zur Videoübertragung zu erhalten.**

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken, K. Kröncke