

EINLADUNG

zum

HABILITATIONSVORTRAG

Dr. Wolfgang Globke (Fakultät für Mathematik, Universität Wien)

"Indefinite homogeneous spaces of finite volume"

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<u>Abstract:</u>

We will take a look at pseudo-Riemannian manifolds of finite volume with a transitive action by a group of isometries. The property of finite volume gives rise to an interesting invariance property on the isometry Lie algebras of these spaces, which reveals a lot about the structure of these algebras. For metric index less than 3, this leads to a complete description of the isometry Lie algebras. In case of a solvable transitive group of isometries, we see that the manifold is a compact quotient of this group by a lattice, and the metric is induced by a bi-invariant metric. We will also discuss a recent result on pseudo-Hermitian manifolds of finite volume. Here, the identity component of the isometry group is found to be compact, and the manifold itself a fibration over a rational variety with torus fiber.

> Freitag, 23. Oktober 2020 09:00 Uhr – 09:45 Uhr

https://zoom.us/j/97679747271?pwd=OXg5bHd kb2ZROEdSVzhSOU5oY0RLdz09

> Meeting-ID: 976 7974 7271 Passcode: sZ3FSu

> > Andreas Cap Radu Ioan Bot