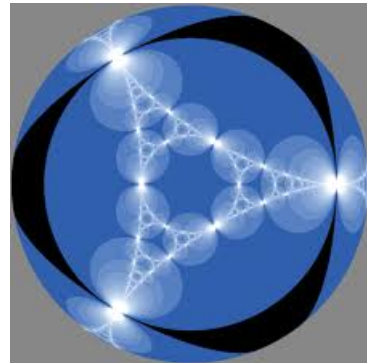**Oberseminar Geometrie**
Department of Mathematics
University of Fribourg
Seminar Room 0.05 PER23
Wednesday, 4 October 2023, 10:20

Giulio Belletti (Sorbonne)

The volume conjecture and generalized hyperbolic polyhedra

Broadly speaking, volume conjectures relate the asymptotic growth of certain quantum invariants of topological objects (manifolds, links, graphs) to the volume of some hyperbolic structure on the object. I will give an overview of the topic without assuming any previous knowledge of quantum invariants, and I will discuss how studying this conjecture naturally leads to questions in hyperbolic geometry, especially as it pertains to the volume of hyperbolic polyhedra and to a more general notion of hyperbolic tetrahedron.