

Oberseminar Geometrie Department of Mathematics University of Fribourg Physics 2.52 Wednesday March 15, 2023, 10:20

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## Geometry and rigidity of quasi-isometries of horospherical products

Horospherical products of two Gromov hyperbolic spaces where introduced to unify the construction of metric spaces such as Diestel-Leader graphs, the Sol geometry or treebolic spaces.

In this talk we will first recall all the bases required to construct these horospherical products, then we will study their large scale geometry through a description of their geodesics and visual boundary.

Afterwards we will get interested in a geometric rigidity property of their quasi-isometries. This result will lead us to a description of the quasi-isometry group of solvable Lie groups constructed as horospherical products and to a new quasi-isometry classification for some solvable Lie groups.