

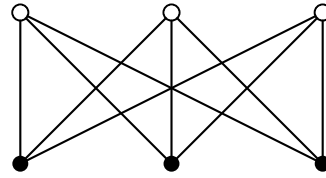
Oberseminar Geometrie

Department of Mathematics

University of Fribourg

Physics 2.52

Wednesday December 16, 2020, 10:20



GABRIEL PALLIER (UNIFR)

Coarse geometries of right-angled Fuchsian buildings

Generalizing hyperbolic Coxeter complexes of dimension 2, Fuchsian buildings are worth of study in both hyperbolic and metric geometry. Especially, certain tools from analysis and quasiconformal geometry have proven efficient in the study of their coarse geometry. This seminar will present a particular construction of certain Fuchsian buildings and review what is known about the coarse embeddings and equivalences (or quasiisometries) between them, after the works of Benakli, Bourdon-Pajot, Xie, Pansu and Hume-Mackay-Tessera. Finally I will discuss a first result and some open questions on a slightly different classification problem, that of sublinear bilipschitz equivalence between Fuchsian buildings, inspired from a comparison with the large-scale geometry of Riemannian homogeneous spaces of negative curvature.