DIFFERENTIAL GEOMETRY/PDE SEMINAR

Wednesday, April 28
Communications 326
3:45 pm

Rigidity of quasi-isometries for some hyperbolic buildings

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In this talk, I would like to explain the main steps of the proof of this following result (joint work with Marc Bourdon).

Theorem: Let Δ be a Fuchsian building with right angles. Then, every quasi-isometry $F : \Delta \to \Delta$ is at bounded distance fron an isometry $\phi : \Delta \to \Delta$.

In particular, I will discuss the following points:

- Definition and basic properties of Fuchsian buildings and their boundaries.
- Conformal structure on the boundary of Fuchsian buildings (differentiability of quasi-conformal mappings, Liouville type theorem, ...).