

Coarse median structures

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Abstract: Coarse median structures have been introduced by B. Bowditch in an attempt to treat several median-like properties of metric spaces (e.g. δ -hyperbolicity) in a unified way. In this talk, we begin by briefly reviewing the definition and basic properties of these structures. Then we explain how to exhibit the coarse median structure on a space with measured walls which is at finite distance to its medianization. Finally, we show that every finite subset of a space which admits a coarse median structure can be quasi-isometrically approximated by a finite CAT(0) cube complex (with parameters depending only on the cardinality of the given subset).

The introductory talk: “Examples of median spaces” by Markus Steenbock.