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Cannon-Thurston maps do not always exist

Given an embedding of hyperbolic groups $i: H \hookrightarrow G$, one can seek to define a map between the Gromov boundaries $\hat{\imath}: \partial H \to \partial G$ by

$$\widehat{\imath}(\lim h_n) = \lim \imath(h_n).$$

When $\hat{\imath}$ is well-defined, it is called the Cannon-Thurston map. I will construct an example where $\hat{\imath}$ fails to be well-defined, answering a question of Mitra. This is joint work with Tim Riley.