

Extending rational maps

JULIA MÜNCH

University of Liverpool

Lattès maps are a family of post-critically finite rational maps on the Riemann sphere. They are chaotic in the sense that the Julia set is the whole Riemann sphere. It was shown by Mayer that they can be extended to uniformly quasiregular maps of $\hat{\mathbb{R}}^3$. The Julia set of the resulting map is also the entire sphere $\hat{\mathbb{R}}^3$. In the talk I will explain how these maps are constructed and proceed by illustrating how one can extend other post-critically finite rational maps which are not necessarily Lattès maps.