

Invariant spanning trees for quadratic rational maps.

Timorin V.A.

This is a joint project with A. Shepelevtseva.

A theorem of W. Thurston (sometimes called the fundamental theorem of complex dynamics) opens a door for algebraic, topological and combinatorial methods into dynamics of rational maps on the Riemann sphere. We study Thurston equivalence classes of quadratic post-critically finite rational maps by means of “visual” invariants, the so called invariant spanning trees. A computational procedure for searching for invariant spanning trees will be described. This procedure uses bisets over the fundamental group of a punctured sphere.