

INTERNATIONAL CONFERENCE ON DYNAMICAL SYSTEMS
IN HONOUR OF MICHAŁ MISIUREWICZ ON HIS 60TH BIRTHDAY

BĘDLEWO, POLAND, JUNE 30 – JULY 5, 2008

Counting hyperbolic components and the mating construction

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(joint work with Jan Kiwi)

In some contexts in dynamical systems, it is possible, and useful, to enumerate hyperbolic components. This is, for example, possible in some families of rational maps, where components can be counted as the number of (simple) intersections between two algebraic curves, minus intersections at infinity, which are also computable. One simple construction of hyperbolic rational maps is the mating construction. Matings can also be counted. This count has led to some unexpected equivalences between matings. I shall describe some of these, although the full picture is still far from clear.