THE UNIVERSITY  OF HONG KONG

Institute of Mathematical Research
Department of Mathematics

GEOMETRY SEMINAR

Complex dynamics, postcritical finite maps on the curves of the moduli space M_2

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Abstract

Postcritical finite maps play an important rule in the study of complex dynamics. Let M_2 be the moduli space of quadratical maps on $\mathbf{P}^1$. Milnor introduced the curve $\mathrm{Per}_1(\lambda)$ in M_2, which is the set of conjugate classes of maps with multiplier λ for a fixed point. We show that this curve has infinitely many postcritical finite maps if and only if $\lambda = 0$. In this talk I will begin with some basic notations in complex dynamics, and give the main idea how the proof goes at the end. In my next talk, you will see more details for the method we used here.

Date:	**June 10, 2014 (Tuesday)**
Time:	**2:30 – 3:30pm**
Place:	**Room 210, Run Run Shaw Bldg., HKU**

All are welcome