IGORS GORBOVICKIS, University of Toronto
Parameterizing rational maps by multipliers of periodic orbits

It was suggested by John Milnor to use the multipliers of the fixed points to parameterize the moduli space of degree 2 rational maps of the Riemann sphere. In this talk we will discus an attempt to use multipliers of periodic orbits as the parameters on the moduli space of degree n polynomial or rational maps. We will show that at its generic point, the moduli space of degree n polynomial maps can be locally parameterized by the multipliers of n-1 arbitrary distinct periodic orbits. This is equivalent to the statement that these multipliers are independent. Further, we will discuss how one could try to generalize the above result to the case of degree n rational maps.