

1163-11-555

**Minsik Han\*** ([minsik\\_han@brown.edu](mailto:minsik_han@brown.edu)). *Misiurewicz polynomials for rational maps.*

For a 1-parameter family of rational maps, we can ask which parameter values make the corresponding map post-critically finite with a certain dynamical portrait. Most studies were about the family of unicritical polynomial maps  $z \mapsto z^d + c$ , where such parameter values are the roots of a polynomial called Gleason polynomial, or Misiurewicz polynomial in strictly preperiodic cases. In this talk, we construct Misiurewicz polynomials for a family of rational maps of degree  $d \geq 2$  with an automorphism group containing the cyclic group of order  $d$ , and consider the irreducibility of those polynomials in certain cases. (Received September 09, 2020)