

1154-11-1127 **Minsik Han*** (minsik_han@brown.edu). *Gleason-type polynomials for rational maps*. Preliminary report.

For the family of polynomial maps $\phi_c(z) = z^d + c$ on \mathbb{P}^1 parametrized by the variable c , the values of c such that ϕ_c is post-critically finite with a fixed dynamical portrait are the roots of a polynomial, which is called the Gleason polynomial. The irreducibility of Gleason polynomials in $\mathbb{Q}[c]$ has been much studied, but is still open in general. In this talk, we consider instead a 1-parameter family of rational maps. We construct and study the associated Gleason-type polynomials, including proving irreducibility in some cases. (Received September 13, 2019)