

1139-37-394

Kenneth Jacobs* (ken@northwestern.edu). *A New 'Height' in Arithmetic Dynamics.*

In this talk, I will describe the construction of a new 'height' function on the moduli space \mathcal{M}_d of rational maps over a global field. The construction is based on work of Rumely on the minimal resultant of a rational map over a non-Archimedean field, as well as generalizations of this work to maps over \mathbb{C} . This 'height' is known to be a Weil height in special cases, and we'll discuss progress on proving that it is (comparable to) a Weil height in general. (Received February 17, 2018)