Philadelphia Area Number Theory Seminar

Michael Tepper Penn State Abington

Self-Maps of Projective Space

Abstract: For self maps of projective space over number fields and function fields, semi-stability implies minimality of the resultant. This is used to show the existence of a minimal presentation for these dynamical systems over number fields. It is analogous to the theory of curves when replacing the resultant with the discriminant. Furthermore it leads to the statement of a dynamical analog of Szpiro's conjecture, where we try to bound the degree of the resultant by the degree of conductor. However, when naively stated, this dynamical conjecture is false. I will talk about what may be done to create a viable conjecture.

Thursday, February 25, 2016 2:40–4:00PM

Bryn Mawr College Department of Mathematics Park Science Center **328** Tea and refreshments at 2:20PM in Park 355