NUMBER THEORY SEMINAR

The Resultant and Conductor of Self Maps of Projective Space III

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ABSTRACT: Szpiro's Conjecture says that the minimal discriminant of an elliptic curve over a number field is bounded in terms of its conductor. The function field analog of this case has been proven and there is a reported poof of the number field case, along with the proof of the abc-conjecture by Shinichi Mochizuki. A natural dynamical analog would be to show the resultant of a self map is bounded in terms of its conductor. We will show that while a simple translation to a dynamics situation does not exist, there is still the possibility for a meaningful conjecture to connect the resultant and conductor. (Joint work with Lucien Szpiro and Phillip Williams.)

> WEDNESDAY, MARCH 20, 2013 2:40 - 4:00 PM ROOM 527 WACHMAN HALL DEPARTMENT OF MATHEMATICS