Meeting: 1003, Atlanta, Georgia, SS 26A, AMS-SIAM Special Session on Dynamic Equations on Time Scales; Integer Sequences and Rational Maps, I

1003-11-1298  Thomas J Tucker* (ttucker@math.rochester.edu), Department of Mathematics, Hylan Building, University of Rochester, Rochester, NY 14627, and Lucien Szpiro, Ph. Program in Mathematics, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016. Symmetry between canonical heights of dynamical systems.

Let f and g be polynomial maps on the complex sphere. We will show that the limit of the f-canonical heights of the g-periodic points is equal to the limit of the g-canonical heights of the f-periodic points. We will relate these limits to the sup of the difference between the f-canonical and g-canonical heights and to the Zhang adelic pairing on the corresponding line bundles. (Received October 04, 2004)