BOSTON UNIVERSITY NUMBER THEORY SEMINAR

Ranks of elliptic curves in twist families with a 3-isogeny

Ari Shnidman Boston University

Monday, November 7 at 4:15 pm 111 Cummington Mall, MCS B21 Tea and cookies in MCS 144 at 4:00 pm

Abstract: I'll present recent results on the average size of 3-isogeny Selmer groups in twist families of elliptic curves. For sextic and quadratic twist families, we deduce upper bounds on the average rank and lower bounds on the proportion of twists with rank 0 (resp. 3-Selmer rank 1).