

BOSTON UNIVERSITY NUMBER THEORY SEMINAR

Selmer groups in families of cubic twists

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Monday, Nov 16 at 4:15 pm
111 Cummington Street, MCS B21
Tea and cookies in MCS 144 at 4:00 pm

Abstract: We give estimates for the average size of the 3-Selmer group in cubic twist families of elliptic curves. As a consequence, we conclude that for all but one of these families, the average size of 3-Selmer is infinite. We also show that 0% of curves in a given cubic twist family of genus 1 curves are everywhere locally soluble. This is joint work with Manjul Bhargava.