Abbey Bourdon, David R. Gill, Jeremy Rouse and Lori D. Watson* (watsonl@wfu.edu). On isolated points of odd degree on $X_1(N)$.

For a curve C defined over a number field K, we say that a closed point $x \in C$ of degree d is isolated if it does not belong to an infinite family of degree d points paramaterized by either the projective line or a positive rank abelian subvariety of the curve's Jacobian. In this talk, we characterize elliptic curves with rational j-invariant that give rise to an isolated point of odd degree on $X_1(N)/\mathbb{Q}$ for some positive integer N. (Received September 14, 2020)