On Isolated Points of Odd Degree.

Let $C$ be a curve defined over a number field $k$, and suppose $C(k)$ is nonempty. We say a closed point $x$ on $C$ of degree $d$ is isolated if it does not belong to an infinite family of degree $d$ points parametrized by the projective line or a positive rank abelian subvariety of the curve’s Jacobian. In this talk we will identify the non-CM elliptic curves with rational $j$-invariant which give rise to an isolated point of odd degree on some modular curve $X_1(N)$, where $N$ is a positive integer. (Received August 16, 2020)