Michael E. Zieve* (zieve@umich.edu), University of Michigan, Department of Mathematics, Ann Arbor, MI 48109-1043. Inertness of low-degree algebraic points under covers of curves. Preliminary report.

We describe all rational maps $f: X \to \mathbb{P}^1$ of curves defined over a number field $K$ such that $\deg(f)$ is a large prime and infinitely many low-degree points $P$ on $\mathbb{P}^1$ have an $f$-preimage $Q$ for which $[K(Q) : K(P)] < \deg(f)$. We also give partial results in this direction when $\deg(f)$ is not prime. (Received January 29, 2019)