

A QUICK INTRO TO ALG. GEOM. (MORE!)

DEF: An elliptic curve is a smooth proj. variety of dimension 1, genus 1, and with at least one rational point over the field of definition.

PREVIOUSLY: C curve, P smooth.

- $\text{ord}_P : \bar{K}[C]_P \rightarrow \mathbb{Z}^{\geq 0} \cup \{\infty\}$, $\text{ord}_P(f) = \sup \{d \in \mathbb{Z} : f \in M_P^d\}$
- $t \in \bar{K}(C)$ is a uniformizer if $\text{ord}_P(t) = 1$
- PROP: $f \in \bar{K}(C)$ then

