

Dictionary

Geometry

- X g.-a. variety
- closed subsets in X
- $D(f)$, $f \in k[X]$
- $X \times Y$
- irreducible X
- points in X
- irred closed subsets in X
- irreducible components of X
- regular maps
- birational equiv. class of X
- dominant rat. map $X \rightarrow Y$
- closed irred. containing $Z \subset X$
- components of X containing Z

Algebra

- $k[X]$
- ideals in $k[X]$
- $k[X]_f$
- $k[X] \otimes_k k[Y]$
- $k[X]$ domain
- maximal ideals in $k[X]$
- prime ideals in $k[X]$
- minimal prime ideals in $k[X]$
- k -algebra homos
- $k(X)$
- field homo $k(Y) \rightarrow k(X)$
- prime ideals in $\mathcal{O}_{X,Z}$
- minimal prime ideals in \mathcal{O}_X