$f \in$
$Q[X, Y]$
$f(x,y) = aX^3 + bX^2Y + cXY^2 + dY^3 + eX^2 + fXY + gY^2 + hX + iY + J,$

C
Q^2
f
$A_R{}^3 \setminus$
$\{(0,0,0)\}$
$\sim$
$(a,b,c) \sim$
(a_1, b_1, c_1)
$t \neq$
0
$(a,b,c) = (ta_1, tb_1, tc_1).$

$[a :$
$b :$
$c]$
$P_R^2 =$
$A_R^3/\{(0,0,0)\}$
R
K
$P_K^n =$
$A_K^{n+1}/\{(0,0,0,...)\}$
n
K
L
K
$P_K^n \longrightarrow$
P_L^n
$[x_0 :$
$... :$
$x_n] \in$
P_K^n
$[x_0 :$
$... :$
$x_n] \in$
P_L^n
P_R^n
A_R^{n+1}
P^0
A^1
A^1
P^0
A^0
P^{n+1}
$A^{n+1} \sqcup$
P^n
$U_0 =$
$\{[x_0 :$
$... :$
$x_{n+1}] :$
$x_0 \neq$
$0\}$
$x_0 \neq$
0
$\phi : U_0 \longrightarrow A^{n+1}$

$$[x_0 : ... : x_{n+1}] \longrightarrow (x_1 x_0, ..., x_{n+1} x_0),$$

$\psi : A^{n+1} \longrightarrow U_0$

$$(x_1, ..., x_{n+1}) \longrightarrow [1 : x_1 : ... : x_{n+1}],$$

ϕ
ψ
$V_0 =$
$P^{n+1} \setminus$
U_0
$V_0 \longleftrightarrow P^n$

$$[0 : x_1 : ... : x_{n+1}] \longleftrightarrow [x_1 : ... : x_{n+1}].$$

P^0
P^0
K
$A^n =$
A_K^n
$P^n =$
P_K^n
$\Pi \subseteq$
A^{n+1}
A^{n+1}
$[\Pi]$
$\Pi \setminus$
$\{(0, ..., 0)\}$
P^n
$n =$
3
$[\Pi]$