

The blossoming principle

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1 Polynomial maps between affine spaces

Definition 1. A coordinate system on a given affine space $(P, V, +)$ consists of an origin point in P and a vector space basis for V .

Definition 2. A polynomial map between two affine spaces with chosen coordinate systems ...

Theorem 3. *Polynomial map definition is independent of chosen affine space basis.*

Definition 4. Polynomial map (for any basis)

Theorem 5. *Affine maps are polynomial of degree 1.*

2 Blossoming principle

Definition 6. Multiaffine map

Definition 7. Symmetric map

Theorem 8. *Blossoming principle*