Chapitre 27 : Matrices

Def 1.1 : Matrice des composantes

$$x = \sum_{i=1}^{p} x_i e_i$$

$$\mathrm{Mat}_{B_E}(x) = (x_{i,1})_{1 \leq i \leq p}$$

Def 1.4 : Matrice d'une application linéaire

$$u(e_j) = \sum_{i=1}^{n} a_{i,j} f_i$$

Prop 1.8

$$\mathrm{Mat}_{B_F}(y) = \mathrm{Mat}_{B_E,B_F}(u) \times \mathrm{Mat}_{B_E}(x)$$

$$\Rightarrow Y = AX$$

Prop 1.9

$$\mathrm{Mat}_{B_E,B_G}(v \circ u) = \mathrm{Mat}_{B_F,B_G}(v) \times \mathrm{Mat}_{B_E,B_F}(u)$$

Prop 3.3

$$\mathrm{Mat}_B(x) = P_{B,B'} \times \mathrm{Mat}_{B'}(x)$$

$$\Rightarrow X = P_{B,B'} X'$$

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