

Scalar : serifs, non-bold

Vectors : serifs, bold
 $\boldsymbol{a} = a_i, \boldsymbol{\alpha}, \boldsymbol{\gamma}, \boldsymbol{x}, \boldsymbol{\xi}, \boldsymbol{y}, \boldsymbol{z}, \dots$

Matrix : serifs, bold, (uppercase)
 $\boldsymbol{A} = a_{ij}, \boldsymbol{\Gamma}, \boldsymbol{X}, \boldsymbol{\Xi}, \boldsymbol{Y}, \boldsymbol{Z}, \dots$

Tensor : sans-serifs, bold, upper case
 $\boldsymbol{A} = A_{ijk}, \boldsymbol{X}, \boldsymbol{Y}, \boldsymbol{Z}, \dots$

Random variable/vector : serifs, non-bold, uppercase
 $A = A_i, X, Y, Z, \dots$