

# Summary of notations

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Class	Examples	italic	serif	bold	underline
Scalar	$x, \lambda$	✓	✓	✗	✗
Vector	$\mathbf{v}, \mathbf{F}$	✓	✓	✓	✗
Matrix	$\mathbf{A}, \mathbf{M}$	✓	✓	✓	✗
4-Vector	$\underline{\mathbf{v}}, \underline{\mathbf{P}}$	✓	✓	✓	✓
Tensor	$\underline{\mathbf{G}}, \underline{\mathbf{T}}$	✓	✗	✓	✗
Field	$\mathbf{R}, \mathbf{C}$	✗	✗	✓	✗

**Why the underline?** I try to stick close to ISO 80000-2. One problem I have in Physics are the three-vectors and four-vectors. Mathematically they are just from  $\mathbf{R}^3$  and  $\mathbf{R}^4$  respectively and they are both vectors. One sometimes has equations like  $\underline{\mathbf{x}} \cdot \underline{\mathbf{p}} = x^0 p^0 - \mathbf{x} \cdot \mathbf{p}$ . This would not be clear if one write  $\mathbf{x} \cdot \mathbf{p}$  or  $x \cdot p$  on the left side, I think.