

Vectors, matrices, etc.

Scalar quantities are usually set in lightface type.

Three-vectors are generally set in **boldface** type, which may be indicated in manuscripts by either a wavy underline or an arrow over the character (\tilde{x} or \vec{x}). Unit vectors are also generally set in boldface and are distinguished from ordinary three-vectors by a caret (the preferred notation is lowercase boldface e, i.e., \hat{e}). A unit vector in the direction of an already defined vector \mathbf{k} is thus denoted by $\hat{e}_{\mathbf{k}}$ or by the same letter with a caret, i.e., $\hat{\mathbf{k}} = \mathbf{k}/|\mathbf{k}|$. Four-vectors and the magnitudes of components of all vectors are set in lightface type.

More general vectors, matrices, etc., are usually set in lightface; boldface may alternatively be used to distinguish one from the other. If neither the context nor the typeface makes the distinction sufficiently clear, a distinguishing mark may be used.

Second-rank tensors are usually set as capital sans serif letters (A).

The sets of complex, real, etc., numbers may be denoted by the standard open-font symbols \mathbb{C} , \mathbb{R} , etc.

Group representations signified by numerals (e.g., **8** for the eight-dimensional representation) are set in boldface.