Contents

Based on AIP Style Guide (4th Edition)

1   General Guidance

Tables, Figures and Captions

>   In Eq. (13), (14), and (16)
>
>   In Fig. 4(a)
>
>   In Ref. 5

Dates and numbers

>   02 February 2016 (no commas)
>
>   four or fewer numbers closed up:
>
>>   1200
>>   24.0032 cm
>
>   Five or more digits, spaces instead of commas:
>
>>   12 000
>>   24.077 89 cm
>
>   one throgh ten
>
>   11,12 and above
>
>   2x2 matrix (numerals)
>
>   0.03 and 106.0(no "naked" decimal points
>
>   6 V (number before units are always numerals)
>
>   1D, 2D, 3D

Punctuation

>   en-dash: Paris–London train, (1950–), University of Wisconsin–Madison
>
>   serial commas (a, b, and c)
>
>   hyphenate multi-word modifiers: macro-time
>
>   parenthesis:
>
>>   inserted into another sentence, no period (such as this).
>>   isolated, period inside. (Such as this.)
>>   pairs surrounded letters in innumerated list (a) and (b)
>
>   possessives: Smith and Green's theory
>
>   plurals:
>
>>   1950s
>>   x's, K's
>
>   quotation marks after commas and periods, before colons and semi-colons

Abbreviations

>   Plural add 's: LCAO's

2 Specific words and terms

A

α particle

ad hoc

à la

anti-compounds closed (antilogarithm)

B

burnup (n)

C

Cartesian

collision-flux estimator

cross-section (n)

cross term

D

delta-tracking

Doppler

downscatter

E

eigenfunction

eigenvalue

F

Fourier transform/analysis/spectra

G

Gauss-Seidel (adj)

H

half-compound hyphenated:

  half-life

halfway

I

indexes (to book)

indices (to variable)

in situ

J

K

L

Laplacian

l.h.s.

lifetime

M

Maxwell(ian)

midpoint

modeling

multigroup

multivarient

N

non-compound closed:

  nonelastic

  nonradioactive

  but proper noun, symbol, numeral:

  non-Fermi

  12-fold

O

P

path length

Q

R

radioactive

ray tracing

r.h.s.

runtime

S

setup

self-compound hyphenated:

  self-shielded (adj)

semiempirical

semi-infinite

T

track length

track-length estimator

U

upscatter

uranium

V

W

waveheight

wavelength

X

x ray (n)

x-ray (adj)

Y

Z

3   Math and notation

Cross-sections

macroscopic: $\tilde{\sigma}$

microscopic: σ

Matrices

Bold capital letters, $\mathbf{A}$.

Use brackets (`bmatrix`) for normal matrix, pipes (`vmatrix`) for determinants, and double pipes (`Vmatrix`) for a matrix norm.

Vectors

Topped with an arrow, $\vec{\phi}$. Vector superscripts must be shifted slightly using `\vec{\phi}^{\,\ell}`. For comparison:

$$\text{\texttt{\textbackslash vec\{\textbackslash phi\}\^{}\{\textbackslash ell\}}} \quad : \quad \vec{x}^{\ell}$$
$$\text{\texttt{\textbackslash vec\{x\}\^{}\{\textbackslash,\textbackslash ell\}}} \quad : \quad \vec{x}^{\,\ell}$$

Use hats to denote unit vectors, $\hat{\Omega}$.

In general, if a vector is made up of other vectors, use a capital letter for the larger vector, and lowercase for the smaller vectors.

$$\vec{\Phi} = \begin{bmatrix} \vec{\phi}_0 \\ \vec{\phi}_1 \end{bmatrix}$$