

# The **nuc** package, v0.1

Neal Davis

April 26, 2011

`nuc.sty` is provided by Neal Davis (davis68@illinois.edu). This package provides automatic notation for nuclear isotopes. Isotopes which have  $Z$  with more digits than  $A$  require special spacing to appear properly. `nuc.sty` is released under the LaTeX Project Public License.

This is an early draft (v0.1) of this package.

It is invoked in the usual way, `\usepackagenuc` and each element and isotope is indicated by `\(element name)\{element weight\}`. For instance, `\Pa{231}` produces  ${}^{231}_{91}\text{Pa}$ ; `\O{18}` produces  ${}^{18}_8\text{O}$ ; and `\H{3}` produces  ${}^3_1\text{H}$ . This of necessity overrides the basic L<sup>A</sup>T<sub>E</sub>X commands `\H`, `\O`, `\P`, `\S`, `\Pr`, and `\Re`.

It appears that under certain circumstances, may be required prior to invoking the element (i.e., `\protect\Fe{56}`).

All elements are supported, with additional support for deprecated atomic symbols such as  ${}^{93}_{41}\text{Cb}$  (columbium, now niobium) and  ${}^{263}_{104}\text{Ku}$  (kurchatovium, now rutherfordium).

This package does not currently support omission of the atomic number subscript, although that is planned for the next version.

`nuc.sty` is released under the LaTeX Project Public license v1.3 or later.