

# algorithm2e.sty — package for algorithms

release 5.0

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Report bugs and comments to [cfiorio@um2.fr](mailto:cfiorio@um2.fr)

[algorithm2esty-annonce@lirmm.fr](mailto:algorithm2esty-annonce@lirmm.fr) mailing list for announcements

[algorithm2esty-discussion@lirmm.fr](mailto:algorithm2esty-discussion@lirmm.fr) mailing list for discussion<sup>\*†‡§¶\*\*†</sup>

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## Contents

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<sup>†</sup>Martin Blais for his suggestions

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# 1 Introduction

Algorithm2e is an environment for writing algorithms in L<sup>A</sup>T<sub>E</sub>X2e. An algorithm is defined as a floating object like figures. It provides macros that allow you to create different sorts of key words, thus a set of predefined key words is given. You can also change the typography of the keywords. See ?? for two long examples of algorithms written with this package.

You can subscribe to `algorithm2e-announce` mailing list to receive announcements about revisions of the package and to `algorithm2e-discussion` to discuss, send comments, ask questions about the package. In order to subscribe to the mailing lists you have to send an email to `sympa@lirmm.fr` with `subscribe algorithm2e-announce Firstname Name` or `subscribe algorithm2e-discussion Firstname Name` in the body of the message.

Changes from one release to the next are indicated in release notes at the beginning of the packages. For this release (5.0), changes are indicated at the end of this document.

# 2 How to use it: abstract

You must set `\usepackage[options]{algorithm2e}` before `\begin{document}` command. The available options are described in ??.

The optional arguments `[Hhtbp]` works like those of figure environment. The **H** argument forces the algorithm to stay in place. If used, an algorithm is no more a floating object. Caution: algorithms cannot be cut, so if there is not enough place to put an algorithm with H option at a given spot, L<sup>A</sup>T<sub>E</sub>X will place a blank and put the algorithm on the following page.

Here is a quick example<sup>1</sup>:

```
\begin{algorithm}[H]
  \SetAlgoLined
  \KwData{this text}
  \KwResult{how to write algorithm with \LaTeX2e }

  initialization\;
  \While{not at end of this document}{
    read current\;
    \eIf{understand}{
      go to next section\;
      current section becomes this one\;
    }{
      go back to the beginning of current section\;
    }
  }
  \caption{How to write algorithms}
\end{algorithm}
```

which gives

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<sup>1</sup>For longer and more complexe examples see ??