

Preparing an article for publication in an Institute of Physics Publishing journal using L^AT_EX

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Abstract. This document describes the preparation of an article using L^AT_EX 2_ε and `iopart.cls` (the IOP L^AT_EX 2_ε preprint class file). This class file is designed to help authors produce preprints in a form suitable for submission to any of the journals published by IOP Publishing. Authors submitting to any IOP journal, i.e. both single- and double-column ones, should follow the guidelines set out here. On acceptance, their TeX code will be converted to the appropriate format for the journal concerned.

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1. Introduction

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In Ref. [?]. In Refs. [?, ?]. On webpage [?].

2. Results and discussions

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2.1. Sample subsection

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Figure 1. This is sample picture – ShareLaTeX lion.

2.2. Simplified coding and extra features for tables

The basic coding format can be simplified using extra commands provided in the `iopart` class file. The commands up to and including the start of the tabular environment can be replaced by

```
\Table{\label{label}Table caption}
```

Table 1. A table with headings spanning two columns and containing notes. To improve the visual effect a negative skip (`\ns`) has been put in between the lines of the headings. Commands set-up by `\lineup` are used to aid alignment in columns. `\lineup` is defined within the `\Table` definition.

Nucleus	Thickness (mg cm ⁻²)	Composition	Separation energies	
			γ , n (MeV)	γ , 2n (MeV)
¹⁸¹ Ta	19.3 ± 0.1 ^a	Natural	7.6	14.2
²⁰⁸ Pb	3.8 ± 0.8 ^b	99% enriched	7.4	14.1
²⁰⁹ Bi	2.86 ± 0.01 ^b	Natural	7.5	14.4

^a Self-supporting.

^b Deposited over Al backing.

this also activates the definitions within `\lineup`. The final three lines can also be reduced to `\endTable` or `\endtab`. Similarly for a table which does not fit in when indented `\fulltable{\label{label}caption} ... \endfulltable` or `\endtab` can be used. L^AT_EX optional positional parameters can, if desired, be added after `\Table{\label{label}caption}` and `\fulltable{\label{label}caption}`.

`\centre{#1}{#2}` can be used to centre a heading `#2` over `#1` columns and `\crule{#1}` puts a rule across `#1` columns. A negative space `\ns` is usually useful to reduce the space between a centred heading and a centred rule. `\ns` should occur immediately after the `\` of the row containing the centred heading (see code for table ??). A small space can be inserted between rows of the table with `\ms` and a half line space with `\bs` (both must follow a `\` but should not have a `\` following them).

References

- [1] J. Doe, Article name, *Phys. Rev. Lett.*
- [2] J. Doe, J. Smith, Other article name, *Phys. Rev. Lett.*
- [3] www.google.pl