

# HOW TO USE THE AIF CLASS FILE: A SAMPLE LATEX SOURCE FILE

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ABSTRACT. — This document is a short user's guide to the L<sup>A</sup>T<sub>E</sub>X class for articles in *Annales de l'Institut Fourier*.

RÉSUMÉ. — Ceci est le résumé français.

## 1. Introduction, meta-data commands

This is the beginning of our article.

### 1.1. Title

The command for the title is: `\title`. The `\maketitle` command must be put after the abstract.

### 1.2. Citations

The bibliography must be built using bibtex. A sample of a bibtex file `samplebib.bib` is with this sample.

The references must be referred to in the article by using the `\cite` command, which produces for example [5] or [6] (see also the comments in `samplebib.bib`).

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*Keywords:* Example, Optimization, Journal.

*2020 Mathematics Subject Classification:* 00X99.

(\*) The first author is supported by UK Research Council project ENIGMA through grant #2019-\$\$\$55900.

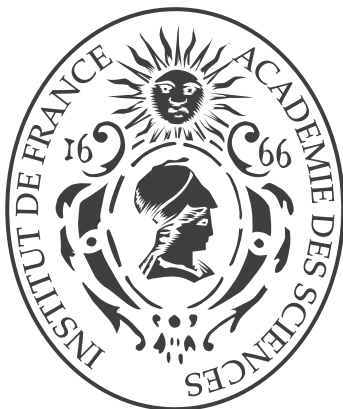


Figure 2.1. Example of figure.

## 2. Figures

The article being compiled with pdf<sub>l</sub>atex, the figures should also be in PDF (esp. for vector graphics, bitmap graphics should be of good enough quality and can be PNG or JPEG). The inclusion of the figure is done using the following commands.

The parameter `xxx`, a real number between 0.0 and 1.0, indicates the width the figure should take in the page. One can refer to the figure with `\ref{refname}`, which gives for example:

Figure 2.1 is an example of figure.

To refer to a specific definition, theorem, etc., put `\label{labelname}` inside the corresponding environment and use `\ref{labelname}` in text to point to this definition, theorem, etc.

Here is an example:

**THEOREM 2.1.** — *Most theorems are true.*

*Proof.* — Theorem 2.1 is obviously true. □

**Example 2.2.** — This should look like a good example.

**Remark 2.3.** — Can an example like Example 2.2 give some insight in Theorem 2.1's proof?

You can refer to the web page of the published article through its DOI, which the Mersenne systems knows when producing the PDF, like this: supplementary material for this paper can be found at **DOI not yet assigned** or obtained from the author.

## BIBLIOGRAPHY

- [1] R. AZENCOTT & D. DACUNHA-CASTELLE, *Séries d'observations irrégulières*, Masson, Paris, 1984.
- [2] X. BLANC, C. LE BRIS & P.-L. LIONS, “Caractérisation des fonctions de  $\mathbb{R}^3$  à potentiel newtonien borné”, *C. R. Acad. Sci. Paris, Ser. I* **334** (2002), p. 15-21.
- [3] R. DA PRATO & P. GRISVARD, “Sommes d'opérateurs linéaires et équations différentielles opérationnelles”, *J. Math. Pures Appl.* **54** (1975), p. 305–387.
- [4] C. KING & C.-L. TERNG, “Submanifolds in path space”, in *Global Analysis in Modern Mathematics* (K. Uhlenbeck, ed.), Publish or Perish, Inc., Houston, 1993, p. 253-282.
- [5] D. E. KNUTH, *The T<sub>E</sub>Xbook*, Addison Wesley Professional, Massachusetts, 1984.
- [6] J. LERAY & J.-L. LIONS, “Quelques résultats de Višik sur les problèmes elliptiques nonlinéaires par les méthodes de Minty-Browder”, *Bull. Soc. Math. France* **93** (1965), p. 97-107, [http://www.numdam.org/numdam-bin/item?id=BSMF\\_1965\\_\\_93\\_\\_97\\_0](http://www.numdam.org/numdam-bin/item?id=BSMF_1965__93__97_0).
- [7] M. VAJAC, “Gauge theory techniques in quantum cohomology”, PhD Thesis, Boston University, 2000.
- [8] A. ÜSTÜNEL, “Stochastic analysis on Lie groups”, in *Stochastic Analysis and Related Topics VI: The Geilo Workshop* (L. Decreusefond, J. Gjerde, B. Øksendal & A. Üstünel, eds.), Progress in Probability, Birkhäuser, 1988, p. 129–158.

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