

Actual title

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ADDRESS OF AUTHOR 1
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URL: <http://www.somewhere.pt/~author1>

AUTHOR 2
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Abstract. An abstract should be written using the environment defined as in this example file. The text describes briefly the use of the **stochfin** class.

1. Introduction. This file gives a brief description of the class **stochfin.cls**. This class is based on the standard **article** class of the L^AT_EX distribution. You have available the standard commands and environments as is the standard **article** class, with the changes that will be described.

2. Preamble. As in the example file, the code starts with the instruction

```
\documentclass{scf2015}
```

possibly with the usual optional arguments.

There should be no `\pagestyle` command.

You should provide a *title* and a *running title*. The instruction for this purpose is

```
\title{Running title}{Actual title}
```

You are expected to give two arguments, even if they coincide. Notice that the *running title* is to be used in the headers of the pages so it should not be long.

For each author you should identify his/hers *name*, an *abbreviated version of the name* and possibly include some *acknowledgments*. Also you should give the *address*. If they exist and you wish to make them available, you may give the *email* and the *url* addresses. For this purpose you should use the following instructions:

```
\author{abbrev. name}{Full name\thanks{Any thanks}}  
\address{Address of author}  
\email{@somewhere.pt}  
\url{http://www.somewhere.pt/$\sim$author1}
```

Note that the `\author` command expects two arguments, even if they coincide.

In case of several authors, you should use, in the order given, the instructions concerning author 1, then author 2, and so on.

Besides these instructions, include your command definitions. Please note that if you use any non standard package you should also send the file defining this package. If in doubt add commented lines with a contact email or attach the file with your submission.

*Thanks of author 1

† Author 3 wishes to thanks someone.

3. The document.

3.1. Generating the title. As expected, the body of the document should start with the command `\maketitle`, which generates the title and the identification of the authors.

3.2. The abstract. There is an environment to handle the layout of the abstract. It goes, as expected, like this

```
\begin{abstract}
Abstract text.
\end{abstract}
```

3.3. Sectioning. All the usual L^AT_EX sectioning commands are available: `\section`, `\subsection`, `\subsubsection`, `\paragraph`, `\subparagraph`.

3.4. Environments. All the usual L^AT_EX environments are available: `\center`, `\description`, `\enumerate`, `\figure`, `\flushleft`, `\flushright`, `\itemize`, `\list`, `\minipage`, `\picture`, `\quotation`, `\quote`, `\tabbing`, `\table`, `\tabular`, `\thebibliography`, `\titlepage`, `\verbatim`, `\verse`.

Although the `\titlepage` is available you are kindly asked to avoid it.

If including graphics or figures please attach the files. As it is intended for the generation of pdf files, the use of png graphic format files is preferred.

3.5. Mathematical environments. Almost all the usual L^AT_EX mathematical environments are available: `\array`, `\eqnarray`, `\equation`. The `\theorem` is not defined. Instead the **stochfin** class defines several theorem like environments ready to use:

Environment name	Heading	Environment name	Heading
thm	Theorem	prob	Problem
cor	Corollary	claim	Claim
lem	Lemma	fact	Fact
prop	Proposition	axiom	Axiom
defn	Definition	conj	Conjecture
exmp	Example	crit	Criterion
rem	Remark	prin	Principle
assum	Assumption	alg	Algorithm
hypo	Hypothesis		

The definitions of these environments take care of the numbering, so please do not redefine the automatic numbering handled by L^AT_EX. Obviously the `\label` and `\ref` commands are available. As an example, the code

```
\begin{thm}
This is supposed to be a theorem.
\end{thm}
```

generates the text:

Theorem 3.1. *This is supposed to be a theorem*

Notice the this is the first theorem in section 3. If afterwards we find the code

```
\begin{axiom}
This is supposed to be an axiom.
\end{axiom}
```

we find the text:

Axiom 3.2. *This is supposed to be an axiom.*

We are still in section 3, but this is the second theorem like structure used.

There is an environment to write *proofs* of your results. It goes like this:

```
\begin{proof}
Proof text.
\end{proof}
```

and it generates the following text, with the black square flushed right:

Proof. Proof text. ■

Here follows an example of the use of a theorem like structure with the respective proof.

Proposition 3.3. *This is supposed to be a proposition.*

Proof. And this should be the text that would prove whatever was stated, ending with a black square flushed right. ■

If, for any reason, you want to use the black square that identifies the end of proof you may use the command `\halmos`.

4. References. Please use the `\thebibliography` environment with numbered or named references. They should ordered by the last name of the first author and be formatted as the examples that follow (here using numbered references):

References

- [1] O. Barndorff-Nielsen, N. Shephard (2000). *Econometric analysis of realised volatility and its use in estimating Lévy based non-Gaussian OU type stochastic volatility models*. Symposium in Honour of Ole E. Barndorff-Nielsen (Aarhus, 2000), 89–95, Memoirs 16, Univ. Aarhus, Aarhus.
- [2] E. Eberlein (2001). *Application of generalized hyperbolic Lévy motions to finance*. In: *Lévy processes*, eds.: O. Barndorff-Nielsen, T. Mikosch S. Resnick, Birkhäuser Boston, Inc., Boston, 319–336.
- [3] I. Karatzas, S. Shreve (1991). *Brownian motion and stochastic calculus*. Springer-Verlag. New York.
- [4] A. N. Shiryaev, M. Ёor, M (2003). On stochastic integral representations of functionals of Brownian motion. I. (Russian) *Teor. Veroyatnost. i Primenen.* 48, no. 2, 375–385.