Basic Guidelines for Preparing a Contribution for the 38th Volume

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Summary. This is an attempt to give some basic recommandations to authors of contributions to the 38th volume of the *Séminaire de Probabilités.*

Key words: Séminaire de Probabilités, 38th volume.

Introduction

From the TEXnical point of view the 38th volume of the *Séminaire de Probabilités* is prepared as a single LATEX document. This means that every contribution will be included as some input file into some global LATEX file. This causes some constraints on both sides: editors and their TEXnical support team, but also authors.

1 First of all

Once the paper is accepted for publication in the *Séminaire de Probabilités*, and all the corrections asked to the authors have been done, it is time to pass the TEXnical part and contact the TEXnical crew (me). Depending on the author's skill in LATEX and such, the guidelines are be different. So, below, one should choose the section which fits his (her) situation.

2 Experienced LATEX' users

2.1 Class and documentation

The class of document in use for the *Séminaire de Probabilités*—and also for other Springer publications—is called *svmult* (Springer Verlag Multiple...). One can find the class file at `ftp://ftp.springer.de/pub/tex/latex/physgl/mult/styles/svmult.cls`

and various documentations in the directory

`ftp://ftp.springer.de/pub/tex/latex/physgl/mult/`

especially [3]. This class brings predefined environments for theorems, lemmas, remarks, etc., some supplementary control sequences for mathematics. Among them, there are `\E` for the exponential-e, `\D` for the differential-d and `\I` for the imaginary-i as one can see on

$$\int_{-\infty}^{+\infty} \mathrm{e}^{\mathrm{i}\theta x}\mathrm{e}^{-x^2\!/2}\,\mathrm{d}x = \sqrt{2\pi}\,\mathrm{e}^{-\theta^2\!/2}$$

(I hope that this formula is true) which has been coded as

```
\int_{-\infty}^{+\infty} \E^{\I\theta x}\E^{-x^2\!/2}\,\D x
= \sqrt{2\pi}\,\E^{-\theta^2\!/2}
```

where one can also notice the use of negative and positive thin spaces.

2.2 Use of LaTeX packages

Since every contribution is to be included in a larger document, authors should not use exotical LaTeX packages because compatibility problems could arise.

The packages used when making the preceding volume are (*url*,) *amsmath*, *amssymb* and *graphicx* which are quite well-known or documented. Beware of *amsmath*! One must use version 2.0 or more of this package! (There are some heavy incompatibilities with the preceding versions.)

French authors may be tempted to use *fontenc* or/and *babel*. I discourage them of doing so. They can contact the TeXnical support (me) for special features related to the french language (punctuation, french quotes).

2.3 Defining his (her) own theorem like environment

The *svmult* class provides new control sequences for defining theorem-like environments (see documentation [3]). I believe that in most cases it is unnecessary to do so since predefined environments cover most cases encountered in a mathematical paper.

If it is really necessary to define them anew, one should choose names like "mytheorem", "myremark", etc. The reason is that such declarations are global and may interfere with other contributions, and I'll take care only about environments with names like "myknownenvironment".

2.4 Graphics

I love graphics and "I'm sure I'm not the only one" (popular music). Of course they must be in the encapsuled postscript format. One can name them as

"author(s)name(s)number.eps",

for instance "phan17.eps" or "laurel-hardy4.eps", or name them as

"author(s)name(s).number",

as it is common with MetaPost outputs, for instance "phan.17" or "laurel-hardy.4". This would be coherent with the fact that LaTeX files will be named after authors' names.

If one has some difficulties in designing some graphics necessary for his (her) contribution, he/she can contact the TeXnical support. The inclusion of graphics into the document must be done with the control sequences defined in the *graphics* package.

2.5 Personal control sequences

It is not forbidden to use personal control sequences as long as they are really useful, easy to understand, and do not interfere with LaTeX predefined control sequences. Furthermore, they must be defined as local control sequences (no `\global\def` nor `\gdef` definition).

I believe that in most cases personal control sequences are not really needed. For instance, quite often, `\R` stands for `\mathbb{R}`. A quasi-automatical replacement can be done at the end of the typing to free the document of the definition of such a `\R`.

Sometimes, when the definition is more complex, defining a control sequence may appear to be useful even to a someone foreign to the article. For instance

```
\def\Card{\mathop{\rm Card}\nolimits}
```

or

```
\def\Var{\mathop{\rm Var}\nolimits}
```

and use of `\Card` or `\Var` in the document is really shorter and clearer than the replacement text.

In any case, personal control sequences (if any) should be defined in the preamble of the document, that is, between `\documentclass{svmult}` and `\begin{document}`.

2.6 Fine-tuning of the document

I've already mentioned the control sequences `\E` for the exponential-e, `\D` for the differential-d and the imaginary-i. These are recommanded by Springer Verlag, and, from my point of view, make really formulae clearer.

Other recommandations can be found in the TEXbook of D. E. Knuth [2], especially about hand-tuning of delimiters for large displayed formulae, but also about the use of thin spaces and italic corrections (control sequence `\/`). There are also punctuation (remember that punctuation rules are the same in text and in math formulae), hyphenation (word-breaks are not always what they should be).

Help, advises, etc., will be provided by the TEXnical support.

3 Unexperienced LATEX' users

An unexperienced LATEX' user may be someone who would understand less than 50 % of the preceding section but who at least uses LATEX.

For such a person here are my recommandations: first, try to write the simplest as possible LATEX document (see subsections 2.2 and 2.5 but do not care about subsection 2.3); then the document should be in 10 points size (usually the default option of the document class); at last set up the page dimensions by writing

```
\setlength{\overfullrule}{5pt}
\setlength{\textwidth}{28pc}
\setlength{\textheight}{540pt}
```

in the preamble of the document; this will help checking for too long formulae or words.

The TEXnical support will then take care of what remains to be done for the insertion in the volume—and also of the fine tuning described in subsection 2.6.

4 Experienced plainTEX' users

I've always believed that an experienced plainTEX' user is able to use LATEX without any true difficulty. Anyway, what such an author can do is about the same as an unexperienced LATEX's user: avoid too many incomprehensible control sequences; then the document should be in 10 points size; at last set up the page dimensions by writing

```
\overfullrule=5pt
\hsize=28pc
\vsize=540pt
```

at the beginning of the document; this will help checking for too long formulae or words.

The TEXnical support will then take care of the changes to be done for the insertion in the volume.

5 Unexperienced plainTEX' users

The same recommandations hold for an unexperienced plainTEX' user as for a experienced plainTEX' user. The TEXnical support would just have, maybe, a little more work to do.

6 Others?

Well, I don't know what to write in this case. Just see if it can happen.

References

1. LAMPORT (L.), *LATEX: A Document Preparation System*, Addison–Wesley (1986).
2. KNUTH (D. E.), *The TEXbook*, Addison–Wesley (1984).
3. SPRINGER VERLAG, LATEX2e SVMULT Document Class Reference Guide for Contributed Book, Springer Verlag (2002).
`ftp://ftp.springer.de/pub/tex/latex/physgl/mult/refguide.pdf`