

## Title of paper

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ABSTRACT – This file explains how to prepare a contribution for publication in *Rendiconti del Seminario Matematico della Università di Padova*.

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KEYWORDS.  $L$ -function, Selmer group.

### 1. Introduction

Authors are requested to use standard L<sup>A</sup>T<sub>E</sub>X and the class file

`RSMUP.cls`

This style file is very similar to the standard article style file, and it loads `amsmath`, `amsfonts`, `amssymb`, `latexsym`, and with `amsthm.sty` included. It sets the page size to

`\textheight=192mm`

`\textwidth=125mm`

so you should not change the page size. We suggest you use this sample TeX file as a model, modifying it where appropriate.

The T<sub>E</sub>X source file should begin with

`\documentclass{RSMUP}`

Enter the name(s) of the author(s) using the tag

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`\address[e-mail address]{Author's address}`

Each author's name should be entered with a separate `\address` command. No personal style files should be used. Each paper should contain the 2000 Mathematics Subject Classification. Please avoid one-letter lower case newly defined commands like

`\def\epsilon{\varepsilon}` or `\newcommand{\epsilon}{\varepsilon}`

since this can interfere with conversion of your article to Times fonts later. Use instead something like:

`\newcommand{\epsilon}{\eps}{\varepsilon}`

## 2. Some rules

In order to achieve a uniform appearance of all the contributions, we encourage you to observe the following rules when preparing your article.

### 2.1 – *Section and subsections*

Sections and paragraphs are obtained using the commands

`\section{title of section} \subsection{...} \subsubsection{...}`

and unnumbered sections and paragraphs are obtained using their starred forms:

`\section*{title of section} \subsection*{...} \subsubsection*{...}`

### 2.2 – *Displayed formulas*

If you have displayed formulas consisting of more than one line we recommend to you use

`\begin{align}...\end{align}`

instead of

`\begin{eqnarray}...\end{eqnarray}`

(respectively the starred forms) since the former yields a better spacing. Compare:

$$(1) \qquad A = f(x_i) = F'(x),$$

$$(2) \qquad B = g(x_i) = G'(x),$$

$$(3) \qquad A = f(x_i) = F'(x),$$

$$(4) \qquad B = g(x_i) = G'(x).$$

In case you do not want the numbering for every line, type

`\nonumber`

at the end of the line where you do not want a number.

$$(5) \quad \begin{aligned} A &= f(x_i) = F'(x), \\ B &= g(x_i) = G'(x). \end{aligned}$$

If you want a number for the complete block, this works:

`\begin{equation}\begin{split}...\end{split}\end{equation}`

$$(6) \quad \begin{aligned} A &= f(x_i) = F'(x), \\ B &= g(x_i) = G'(x). \end{aligned}$$

If you prefer to number equations in the form (2.1), (2.2), ..., add the line

`\numberwithin{equation}{section}`

to the preamble of your document.

### 2.3 – Theorems and alike

For theorems, lemmas, definitions, etc. use the standard syntax.

`\begin{theorem}...\end{theorem}`, `\begin{lemma}...\end{lemma}`, etc.

Put optional arguments into square brackets (“Theorem, [3]” in the example below).

**THEOREM 2.1** (Theorem 13.14, [3]). *Let  $L$  be an oriented link and let  $\alpha \in B_{2m}$  be such that  $\tilde{\alpha} = L$  as unoriented links. Then there is a  $k \in \mathbb{R}$ ,  $2k \in \mathbb{Z}$ , with  $V_L(t) = t^k(-(t+1))^{m-1}\phi(\pi_0(\alpha))$ .*

**DEFINITION 2.2.** A *preference order* (or *preference relation*) on  $\mathcal{X}$  is a binary relation  $\succ$  with the following two properties.

- (1) *Asymmetry*: If  $x \succ y$ , then  $y \not\succ x$ .
- (2) *Negative transitivity*: If  $x \succ y$  and  $z \in \mathcal{X}$ , then either  $x \succ z$  or  $z \succ y$  or both must hold.

In this example file, enumerations of theorems, lemmas definitions, etc. appear consecutively. If you want separate numbering (Theorem 2.1, Definition 2.1) change e.g.

`\newtheorem[theorem]{definition}`

to

`\newtheorem{definition}{Definition}[section]`

If you want a statement unnumbered, just define

`\newtheorem*{coro}{Corollary}`

to obtain

COROLLARY. *If  $L$  and  $L'$  are two oriented links which are isotopic as unoriented links, then there is a  $k \in \mathbb{Z}$  such that*

$$V_L(t) = t^k V_{L'}(t).$$

For a proof, use

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

An end-of-proof sign  $\square$  is set automatically.

PROOF. This finishes the proof of the corollary.  $\square$

You can also make remarks and give examples with the commands

`\begin{remark}... \end{remark}`  
`\begin{example}... \end{example}`

which will produce:

REMARK 2.3. This is an example of a ‘remark’ element.

EXAMPLE 2.4. This is an example of an ‘example’ element.

## 2.4 – Operator names

There are several  $\text{\TeX}$ -commands setting things automatically upright like `det`, `sin`,... . If you need operators not predefined, simply define e.g.

`\DeclareMathOperator{\Hom}{Hom}`  
`\DeclareMathOperator{\Ker}{Ker}`

and then use

`\Hom`, `\Ker`

to obtain

$$\varphi \in \text{Hom}(G/H) \implies \text{Ker}(\varphi) \neq \{0\}.$$

It is accepted typographical standard that abbreviated mathematical expressions standing for “words” appear in roman (upright) typeface.

## 3. Lists

### 3.1 – Numbered lists

For numbered lists, you should use the  $\text{\LaTeX}$  command

`\begin{enumerate}`  
`\item First item`  
`\item Second item`  
`\end{enumerate}`

in a nested form, and this will produce:

- (1) First item.
- (2) Second item.
  - (a) First subitem.
  - (b) Second subitem.
    - (i) First subsubitem.
    - (ii) Second subsubitem.
  - (c) Third subitem.
- (3) Third item.

### 3.2 – *Bulleted lists*

For a bulleted list, you can use the command

```
\begin{itemize}
\item First item
\item Second item
\end{itemize}
```

which will produce:

- First item
- Second item
- Third item

## 4. References

Citations should always be made with the  $\text{\TeX}$  command

```
\cite{}
```

Also, when citing several works at the same time, you should use

```
\cite{paper1}, \cite{paper2}, \cite{paper3}
```

as, for example, in [1], [2], [3].

It follows a list of references showing you the style in which books and journal articles should be listed.

### REFERENCES

- [1] S. Bloch – K. Kato, *L-functions and Tamagawa numbers of motives*, in: *The Grothendieck Festschrift*, Vol. I, Progr. Math. 86, Birkhäuser, Boston 1990, P. Cartier, et al., eds., pp. 333–400.
- [2] J. S. Milne, *Etale cohomology*, Princeton University Press, 1980.
- [3] F. Cafiero, *Sui problemi ai limiti relativi ad un'equazione differenziale ordinaria del primo ordine e dipendente da un parametro*, Rend. Sem. Mat. Univ. Padova, **18** (1949), pp. 239–257.
- [4] M. A. Seveso, *Stark–Hegner points and Selmer groups of abelian varieties*, PhD thesis, University of Milan, Federico Enriques Department of Mathematics, 2009.