A TAC SAMPLER
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ABSTRACT. This is distributed as a sampler to illustrate good TAC style.

1. Introduction

This note includes samples of what we consider good TAC style. You will note that there are no explicit skips nor any other explicit formatting instructions; these are left to the journal style. For the same reason, there is no explicit numbering of headings or proclamations of Theorems and so forth, but they are labelled to allow logical references, such as to Theorem 2.2.

Please note that there are additional comments in the source file for this sampler that you are urged to consult. Please also consult the on-line author instructions on the TAC web site.

2. Main results

2.1. LEMMA. All papers must be in \LaTeX, version 2e.

PROOF. Otherwise the editors would have to do a lot of work to prepare the paper for publication.

2.2. THEOREM. The TAC style is easy to use.

PROOF. Sectioning is the same as in \LaTeX article style; proclamations such as definitions and theorems are easily specified by macros such as \texttt{\newtheorem{thm}{Theorem}}; it is easy to use \texttt{\mathbf{def}}{Hom} to define a macro \texttt{\Hom} that produces roman Hom when used in math mode. Similarly \texttt{\mathbf{def}}{Set} gives Set in bold.

2.3. THEOREM. [Lamport, 1986] The following are equivalent

1. Lists are best done with listing macros such as enumerate;
2. you will never have to renumber anything if you use automatic numbering of lists and other things.

We would like to thank Donald Knuth, Leslie Lamport, Kris Rose, and all the others who make high quality math typesetting possible.

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2.4. Remark. For proclaimed matter that should be set in Roman we use the \texttt{TAC} macros \texttt{\newtheoremrm{}{}}.

3. Further comments

- Source files should include \textit{all} and \textit{only} author macros that are actually used.
- Be sure to use macros for multicharacter identifiers, such as \texttt{\Hom} above.
- Be sure to distinguish between \texttt{<} and \texttt{⟨} and similarly between \texttt{>} and \texttt{⟩}. Not only does the former character look wrong as a tuple delimiter, but the spacing is completely wrong.
- For diagrams, use \texttt{\textsc{Xy}-picor diagxy}. They can be used together since \texttt{diagxy} is built on top of \texttt{\textsc{Xy}-pic}. A syntax example from the \texttt{diagxy} manual is

$$\bfig
\text{\square/}>>'>'>\rightarrow/[A'B'C'D;e'f'g'm]
\morphism(500,500)|m|/.>/<-500,-500>[B'C;h]
\efig$$

which makes a familiar diagram:

\begin{center}
\begin{tikzpicture}
\node (A) at (0,0) {A};
\node (B) at (1,1) {B};
\node (C) at (0,-1) {C};
\node (D) at (1,-1) {D};
\draw[->] (A) -- (B) node[midway,above] {e};
\draw[->] (C) -- (D) node[midway,above] {m};
\draw[->] (A) -- (C) node[midway,left] {f};
\draw[->] (B) -- (D) node[midway,right] {g};
\draw[->] (A) -- (D) node[midway,above] {h};
\end{tikzpicture}
\end{center}

- Although we accept most reasonable bibliographical styles, the following is the one we most strongly recommend. It results in the author, year entry in the paper, rather than uninformative numbers in brackets. It allows use of e.g. \texttt{\cite{LUG}} and the code for this article is:

\refs
\endrefs
References


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