

The Essentials of L^AT_EX for SES 2006 Abstracts

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Abstracts for the 2006 SES Annual Technical Meeting are typeset using L^AT_EX (a typesetting language). With that said, the text of each abstract should be just plain text and doesn't require any knowledge of L^AT_EX. This nice thing about L^AT_EX is that it allows you to include consistently formatted lists and beautifully typeset equations, even in the most simple document. This file gives you a few guidelines for writing your abstracts in L^AT_EX.*

- ❖ The characters # \$ & ~ _ ^ % { } all have a special meaning and should not be used on their own. You can generate the #, \$, &, %, {, and } characters by escaping them with a backslash, as in: \#, \\$, \&, \%, \{, and \}. For example, the percent character % indicates source that is commented out, so if you want to say 12%, you must write it as 12\% or else everything after the % sign will disappear.
- ❖ Paragraphs are separated by one or more blank lines.
- ❖ Single-quotes should be created using the ‘ and ’ pair, as in ‘the car’, which gives ‘the car’. Similarly, double-quotes should be created using the “ and ” pair, as in “the car”, which gives “the car”.
- ❖ Italic text should be enclosed in curly braces after either the \emph or \textit command. Boldfaced text should be enclosed in curly braces after the \textbf command. For example, the phrase “*dogs* and **cats** living *together*” was created using:

```
\emph{dogs} and \textbf{cats} living \textit{together}.
```

- ❖ Bullet lists are created using the `itemize` environment in the following manner:

```
\begin{itemize}
\item
content of the first bullet;
\item
content of the second bullet;
\item
content of the third bullet.
\end{itemize}
```

which gives:

*If you already know L^AT_EX, then you should be aware that it is only the abstract itself that we require. Thus, you will be inputting only the raw L^AT_EX source that goes between the `\begin{document}` and the `\end{document}`.

- content of the first bullet;
- content of the second bullet;
- content of the third bullet.

❖ Numbered lists are created using the `enumerate` environment in the following manner:

```
\begin{enumerate}
\item
content of the first item;
\item
content of the second item;
\item
content of the third item.
\end{enumerate}
```

which gives:

1. content of the first item;
2. content of the second item;
3. content of the third item.

Both the `itemize` and `enumerate` can be nested.

❖ Footnotes are created using the `\footnote` command. The footnote at the end of this sentence was created using the L^AT_EX source `\footnote{This is a footnote.}`.*

❖ Inline mathematics is enclosed in a dollar sign pair `$$`.[†]

- Exponents are created using the caret `^` and subscripts are created using the underscore `_`. The exponent or subscript are then enclosed in a pair of curly braces `{}`. Some examples are: `$v_{x}(t)$`, which gives $v_x(t)$ and `v^{2}_{0}`, which gives v_0^2 .
- Fractions are created using the `\frac` command with two arguments: the first is the numerator and the second is the denominator.[‡] Therefore, for example, the inline fraction `$\frac{a + b}{c + d}$` gives $\frac{a+b}{c+d}$.
- Greek letters are generated by simply preceding the name of the Greek letter with a backslash `\`. So, for example, α , β , γ , and δ are generated using `$$\alpha$`, `$$\beta$`, `$$\gamma$`, and `$$\delta$`, respectively.
- Displayed equations are created using the `equation` environment. So, for example, the displayed equation

$$q(t) = q_0 + v_0(t - t_0) + \int_{t_0}^t \left[\int_{t_0}^{\tau} a(\xi) d\xi \right] d\tau \quad (1)$$

was created using:

*This is a footnote.

[†]We load the $\mathcal{A}\mathcal{M}\mathcal{S}$ -L^AT_EX math packages so you may use commands associated with those packages if you desire.

[‡]L^AT_EX commands begin with the backslash character (`\`) and their arguments are enclosed in curly braces (`{}`).

```
\begin{equation}
q(t) = q_0 + v_{0} (t - t_{0}) + \int_{t_0}^t
\left[ \int_{t_0}^{\tau} a(\xi) \, d\xi \right] \, d\tau
\end{equation}
```

If you need to do anything in your abstract that is not covered in this document, please contact the organizers.