An example SEG expanded abstract

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SUMMARY

This is an example of using segabs.cls for writing SEG expanded abstracts.

INTRODUCTION

This is an introduction. LaTeX is a powerful document typesetting system (**?**). An excellent reference is (**?**). The new segabs.cls class complies with the LaTeX2e standard.

THEORY

This is another section.

Equations

Section headings should be capitalized. Subsection headings should only have the first letter of the first word capitalized.

Here are examples of equations involving vectors and tensors:

$$\mathbf{R} = \begin{pmatrix} R_{\mathrm{XX}} & R_{\mathrm{YX}} \\ R_{\mathrm{XY}} & R_{\mathrm{YY}} \end{pmatrix} = \mathbf{P}_{M\to R}\,\mathbf{D}\,\mathbf{P}_{S\to M} \quad \mathbf{S} \quad , \qquad (1)$$

and

$$R_{j,m}(\omega) = \sum_{n=1}^{N} P_j^{(n)}(\mathbf{x}_R)\, D^{(n)}(\omega)\, P_m^{(n)}(\mathbf{x}_S) \quad . \qquad (2)$$

Note that the macros for the `\tensor` command has been changed to force tensors to be bold uppercase, in compliance with current SEG submission standards. This is so that documents typeset to the old standards will print out according to the new ones: e.g., tensor $\mathbf{T}$ (note converted to uppercase).

Figures

Figure 1 shows what it is about.

Figure 1: This figure is specified in the document by `\plot{waves}{width=\columnwidth}{This caption.}`.

Multiplot

Sometimes it is convenient to put two or more figures from different files in an array (see Figure 2). Individual plots are Figures 2a and 2b.

The first argument of the `multiplot` command specifies the number of plots per row.

Tables

The discussion is summarized in Table 1.

(a) (b)

Figure 2: This figure is specified in the document by `\multiplot{2}{exph,exgr}{width=0.4\textwidth}{This caption.}`.

Table Example		
migration	$\omega \to k_z$	$k_y^2 + k - z^2\cos^2\psi = 4\omega^2/v^2$
zero-offset diffraction	$k_z \to \omega_0$	$k_y^2 + k_z^2 = 4\omega_0^2/v^2$
DMO+NMO	$\omega \to \omega_0$	$\frac{1}{4}v^2k_y^2\sin^2\psi + \omega_0^2\cos^2\psi = \omega^2$
radial DMO	$\omega \to \omega_s$	$\frac{1}{4}v^2k_y^2\sin^2\psi + \omega_s^2 = \omega^2$
radial NMO	$\omega_s \to \omega_0$	$\omega_0\cos\psi = \omega_s$

Table 1: This table is specified in the document by `\tabl{example}{This caption.}{...}`.

ACKNOWLEDGMENTS

I wish to thank Ivan Pšenčík and Frédéric Billette for having names with non-English letters in them. I wish to thank **?** for providing an example of how to make a bib file that includes an author whose name begins with a non-English character and **?** for providing both an example of referencing a Ph.D. thesis and yet more non-English characters.

APPENDIX A

APPENDIX EXAMPLE

According to the new SEG standard, appendices come before references.

$$\frac{\partial U}{\partial z} = \left\{ \sqrt{\frac{1}{v^2} - \left[\frac{\partial t}{\partial g}\right]^2} + \sqrt{\frac{1}{v^2} - \left[\frac{\partial t}{\partial s}\right]^2} \right\} \frac{\partial U}{\partial t} \qquad \text{(A-1)}$$

It is important to get equation A-1 right.

APPENDIX B

ANOTHER APPENDIX

$$\frac{\partial U}{\partial z} = \left\{ \sqrt{\frac{1}{v^2} - \left[\frac{\partial t}{\partial g}\right]^2} + \sqrt{\frac{1}{v^2} - \left[\frac{\partial t}{\partial s}\right]^2} \right\} \frac{\partial U}{\partial t} \qquad \text{(B-1)}$$

SEG abstract example

Too lazy to type a different equation but note the numeration.

The error comparison is provided in Figure B-1.

SEG abstract example

Figure B-1: This figure is specified in the document by `\plot*{errgrp}{width=0.8\textwidth}{This caption.}`.

SEG abstract example

APPENDIX C

THE SOURCE OF THE BIBLIOGRAPHY