A Sample Research Paper

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An abstract is a great convenience for the reader and is required by all journals.

I. INTRODUCTION

Using latex is pretty easy if you have a sample document you can follow.

II. RESULTS

Including figures, tables, and equations is easy. Latex also permits easy reference to document elements (figures, tables, sections) with the

`\ref`

command**??**. Citations are made with the

`\cite`

command[**?**].

FIG. 1: You will need to include the package graphicx to be able to make figures like this.

A simple table.

TABLE I: $X(3872)$ Discovery Modes.

mass	width	production/decay mode	events	significance	experiment
$3872.0 \pm 0.6 \pm 0.5$	< 2.3 90% C.L.	$B^{\pm} \to K^{\pm} X \to K^{\pm} \pi^+ \pi^- J/\psi$	25.6 ± 6.8	10σ	Belle
$3871.3 \pm 0.7 \pm 0.4$	resolution	$p\bar{p} \to X \to \pi^+ \pi^- J/\psi$	730 ± 90	11.6σ	CDFII
$M(J/\psi) + 774.9 \pm 3.1 \pm 3.0$	resolution	$p\bar{p} \to X \to \pi^+ \pi^- J/\psi$	522 ± 100	5.2σ	DØ
3873.4 ± 1.4	–	$B^- \to K^- X \to K^- \pi^+ \pi^- J/\psi$	25.4 ± 8.7	3.5σ	BaBar

And a sample equation (Eq. **??**).

$$\Gamma(X \to \alpha\beta D) = \int \frac{d^3 Q}{(2\pi)^3} \Gamma(C \to \alpha\beta) \frac{|\tilde{T}(Q)|^2}{(M(X) - E_{CD}(Q))^2 + \Gamma_C^2/4} \tag{1}$$

III. CONCLUSIONS

Man, latex is great!

Acknowledgments

The author is grateful to Donald Knuth for inventing tex, and making publication quality typesetting a reality for scientists around the world.

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[1] *LaTeX : A Documentation Preparation System User's Guide and Reference Manual*, Leslie Lamport [1994] (ISBN: 0-201-52983-1) pages: xvi+272.

[2] I.M. Smart *et al.*, J. Plumb Phys. **50**, 393 (1983).