

Review of Particle Physics

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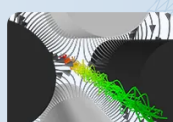
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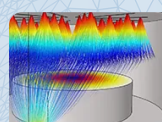
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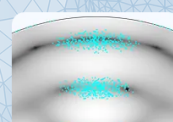
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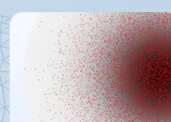
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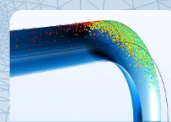
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Review of Particle Physics

W-M Tao *et al* (Particle Data Group)

Online at stacks.iop.org/JPhysG/33/001

Abstract

This biennial *Review* summarizes much of particle physics. Using data from previous editions, plus 2633 new measurements from 689 papers, we list, evaluate, and average measured properties of gauge bosons, leptons, quarks, mesons, and baryons. We also summarize searches for hypothetical particles such as Higgs bosons, heavy neutrinos, and supersymmetric particles. All the particle properties and search limits are listed in Summary Tables. We also give numerous tables, figures, formulae, and reviews of topics such as the Standard Model, particle detectors, probability, and statistics. Among the 110 reviews are many that are new or heavily revised including those on CKM quark-mixing matrix, V_{ud} & V_{us} , V_{cb} & V_{ub} , top quark, muon anomalous magnetic moment, extra dimensions, cosmic background radiation, dark matter, cosmological parameters, and big bang cosmology.

A booklet is available containing the Summary Tables and abbreviated versions of some of the other sections of this full *Review*. All tables, listings, and reviews (and errata) are also available on the Particle Data Group website: pdg.lbl.gov.

The 2006 edition of *Review of Particle Physics* is published for the Particle Data Group as the complete Volume 33 (July 2006) of *Journal of Physics G: Nuclear and Particle Physics*.

This edition should be cited as:

W-M Yao *et al* 2006 *J. Phys. G: Nucl. Part. Phys.* **33** 1

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Abstract, Contributors, Highlights and Table of Contents

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Introduction

Particle Physics Summary Tables

[PDF \(196 KB\)](#)

Gauge and Higgs Bosons

[PDF \(131 KB\)](#)

Leptons

[PDF \(86 KB\)](#)

Quarks

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Baryons

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Searches (Supersymmetry, Compositeness, etc)

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Tests of Conservation Laws

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PDF (70 KB)	Detailed contents for this section
PDF (815 KB)	Constants, Units, Atomic and Nuclear Properties
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PDF (301 KB)	Introduction: Illustrative Key and Abbreviations
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PDF (4.43 MB)	Baryons
PDF (1.85 MB)	Miscellaneous Searches
PDF (240 KB)	Index
PDF (2.48MB)	Color Figures