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HIGHLIGHTS OF THE 2004 EDITION OF THE REVIEW OF PARTICLE PHYSICS

- 512 new papers with 1726 new measurements.
- 119 reviews (most are revised or new).
- Major update to Neutrino Mixing review. Also the three Neutrino Mixing summary plots are combined into one, with the latest results.
- Latest from B -meson physics: 106 papers with 466 measurements: CP violation, $\sin 2\beta$, mixing, V_{cb} , and V_{ud} *etc.*
- New combined review of CP Violation in K , D , and B mesons.
- Major updates of V_{ub} , V_{cb} , Mixing, and b decay reviews.
- Coverage of the new exotic $\Theta(1540)$, with a special review.
- Major update of CKM review.
- New fits for CP violation parameters in K meson decay.
- Reviews of extra-dimensions and grand unified theories.
- New Cosmic Background Radiation review with emphasis on WMAP and other new anisotropy results.
- New reviews on dark matter and cosmological parameters.
- Post-WMAP review on big bang cosmology.
- New and revised sections in Particle Detectors review, especially organic scintillators, Cherenkov detectors, and electromagnetic calorimeters.
- New, improved plots of $R_{e^+e^-}$, including detailed plots covering the low mass region and the regions around the $c\bar{c}$ and $b\bar{b}$ thresholds. Updated Z lineshape plot with the final results from LEP1.