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Measurement of Gamma_{ee}(J/Psi)*Br(J/Psi->ee) and Gamma_{ee}(J/Psi)*Br(J/Psi-> mu mu)

The products of the electron width of the J/ ψ meson and the branching fraction of its decays to the lepton pairs were measured using data from the KEDR experiment at the VEPP-4M electron-positron collider. The results are $\Gamma ee(J/\psi)Br(J/\psi->e+e-)=(0.3323\pm0.0064\pm0.0048)~keV,$ $\Gamma ee(J/\psi)Br(J/\psi->\mu+\mu-)=(0.3318\pm0.0052\pm0.0063)~keV$. Their combinations $\Gamma ee^*(\Gamma ee+\Gamma \mu \mu)/\Gamma=(0.6641\pm0.0082\pm0.0100)~keV,$ $\Gamma ee/\Gamma \mu \mu=1.002\pm0.021\pm0.013~can$ be used to improve the accuracy of the leptonic and full widths and test leptonic universality. Assuming e/μ universality and using the world average value of the lepton branching fraction, we also determine the leptonic $\Gamma ll=5.59\pm0.12~keV$ and total $\Gamma=94.1\pm2.7~keV$ widths of the J/ψ meson.

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