Search for η_b in two-photon collisions with the DELPHI detector

Philippe Gavillet[(a)], Mikhail Shapkin[(b)], Anatoli Sokolov[(b)]

[(a)] CERN, Switzerland
[(b)] IHEP, Protvino

The pseudoscalar meson η_b has been sought in two-photon interactions at LEP II. The data sample corresponds to a total integrated luminosity of 617 pb^{-1} collected at centre-of-mass energies ranging from 161 GeV to 209 GeV. Upper limits at a confidence level of 95% on the product $\Gamma_{\gamma\gamma}(\eta_b)\times\mathrm{BR}(\eta_b)$ are 150, 450 and 660 eV for the $\eta_b \to$(4, 6, 8) charged particle decays, respectively.

E-mail: Anatoli.Sokolov@cern.ch