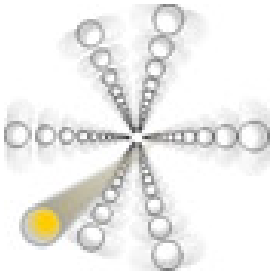

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Comparison of the SLAC Experimental Data on the Radiation of Planarly Channeled Positrons with Theory Taking into Account the Medium Polarization

Monday, 24 September 2012 16:30 (15 minutes)

The experimental results on radiation of (4-16) GeV positrons channeled between the diamond crystallographic planes have been compared with theories without taking into account the medium polarization in many works. Recently it has been developed the corresponding theory taking into account the density effect, and it has been carried out comparison with the experimental data only at 4 GeV and zero entrance angle. In this work using the theory it is presented the results of more complete comparison for various positron energies and entrance angles obtaining better agreement as in the region of relatively low energy photons as well as in the region of high energy photons.

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