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Search for contact interactions in ep collisions with ZEUS experiment at HERA

Content :
A search for physics beyond the Standard Model is performed with high-Q2 neutral current deep inelastic scattering events recorded with the ZEUS detector at HERA. Complete data on scattering of polarized electrons and positrons from HERA II running are combined with electron and positron data from HERA I, resulting in a total luminosity of 0.44 fb^-1. No significant deviations from the Standard Model predictions are observed. Limits are derived on the effective mass scale in eeqq contact interactions, on the mass to the Yukawa coupling ratio for heavy-leptoquark models, on the effective Planck-mass scale in models with large extra dimensions and on the quark charge radius.

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Comments :

These results are presented on behalf of the ZEUS Collaboration