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# A search for resonance decays to lepton+jet at HERA and limits on leptoquarks

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A search for first generation leptoquarks was performed in
polarized electron-proton collider data recorded with the ZEUS detector at HERA in the years 2003-2007. They were analyzed for final states with an electron and jets or with
missing transverse momentum and jets and a search for resonance structures or other deviations from the Standard Model predictions in the spectra of the invariant mass of lepton and jets was performed. No evidence for leptoquark signals was found. The data were combined with the previously taken data at HERA corresponding to an integrated
luminosity of 0.5fb-1 and limits were set on the Yukawa coupling lambda as a function of the leptoquark mass for different leptoquark types within the Buchmueller-Rueckl-Wyler model.

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