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## Parity nonconservation effect in the resonance elastic electron scattering on heavy He-like ions

We investigate the parity nonconservation effect in the elastic scattering of polarized electrons by heavy He-like ions, being initially in the ground state. The enhancement of the parity violation is achieved by tuning the energy of the incident electron in resonance with quasidegenerate doubly-excited states of the corresponding Li-like ion. Two possible scenarios are considered. In the first scenario, the polarization of the outgoing electron is assumed to be detected, while in the second one it remains unobserved. The feasibility of the experimental study of the proposed process is discussed.

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