Abstract Submitted
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Positron Scattering from Neon[1] AL STAUFFER, York University, Canada, ROBERT MCEACHRAN, JAMES SULLIVAN, CASTEN MAKOCHEKANWA, PETER CARADONNA, ADRIC JONES, DANIEL SLAUGHTER, STEPHEN BUCKMAN, CAMS, Australian National University — A joint experimental and theoretical investigation of low-energy positron-neon scattering has been carried out. The experimental studies have used a high-resolution, trap-based beam and scattering cell to obtain absolute cross sections for total scattering, total elastic scattering and positronium formation. The experimental and theoretical total elastic cross section are compared from near threshold up to the positronium formation threshold at ∼15 eV. Theoretically, the elastic differential cross section has also been calculated up to 50 eV including, where appropriate, absorption effects via an ab initio absorption potential.

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