Positron scattering from helium\(^1\) ROISIN BOADLE, JOSHUA MACHACEK, EMMA ANDERSON, PETER CARADONNA, CASTEN MAKOCHENKA, ADRIC JONES, JAMES SULLIVAN, STEPHEN BUCKMAN, CAMS, Australian National University, Canberra — We present new measurements of positron scattering cross sections for helium, including total scattering, total elastic and total inelastic cross sections, which have been extended up to energies of 180eV. We also present a range of low energy elastic differential cross sections. The measurements were performed using our high-resolution, Surko trap-based positron beamline with a typical energy resolution of \(\sim 50\text{meV}\). Comparisons will be made with previous experimental results and with up to date theoretical predictions.

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