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Solving the Relativistic Two-Coulomb-Center Problem using Monte Carlo Methods S.A. ALEXANDER, Southwestern University, R.L. COLDWELL, Retired — Using Variational Monte Carlo methods we have computed highly accurate trial wavefunction forms for the ground states of H+ and Th179+. These trial wavefunctions satisfy the 4-component Dirac Equation and can be used to calculate a variety of interesting expectation values. We will compare our results with those in the literature.

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