HIDDEN CROSSING THEORY APPLIED TO POSITRONIUM FORMATION[1]

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The hidden crossing theory that employs the hyperspherical representation has been applied to Ps-formation in positron–hydrogen collisions in the Ore gap. S-, P-, and D-wave cross sections have been computed. For S-wave scattering, there occurs almost complete destructive interference between the two amplitudes that corresponds to different paths leading to Ps-formation. However, for the D-wave, there occurs almost complete constructive interference.

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