

Abstract Submitted
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Matrix Elements for Hylleraas CI FRANK E. HARRIS, University of Florida — The limitation to at most a single interelectron distance in individual configurations of a Hylleraas-type multiconfiguration wave function restricts significantly the types of integrals occurring in matrix elements for energy calculations, but even then if the formulation is not handled efficiently the angular parts of these integrals escalate to create expressions of great complexity. This presentation reviews ways in which the angular-momentum calculus can be employed to systematize and simplify the matrix element formulas, particularly those for the kinetic-energy matrix elements.

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