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Hylleraas coordinates in few-body atomic and molecular systems[1]
Z.-C. YAN, L.-M. WANG, University of New Brunswick, H.-X. QIAO, Wuhan University, G. W. F. DRAKE, University of Windsor — In this talk, we will present recent progress on the calculations of few-body Coulombic systems, such as atomic lithium and hydrogen molecular ions, using variational method in Hylleraas coordinates, including relativistic and quantum electrodynamic corrections. We will also discuss the applications of these calculations in the determination of nuclear charge radii and the proton-electron mass ratio.

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Zong-Chao Yan
University of New Brunswick

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