CASE(B) DIPOLES AND QUADRUPOLES FOR SINGLET-TRIPLET TRANSITIONS

HERBERT M. PICKETT, *JET PROPULSION LABORATORY, CALIFORNIA INSTITUTE OF TECHNOLOGY, PASADENA, CA 91109*.

Beginning with Hougen and Watson, singlet-triplet transition dipoles and transition quadrupoles have been calculated starting from a Hund's case(a) basis. In this talk, the expressions for matrix elements of transition dipoles will be described using spherical tensor algebra for both the case (a) basis and case (b) basis. Applications to the atmospheric singlet-triplet transitions of O_2 will be presented.