1100-33-308   **Howard S. Cohl*** (`howard.cohl@nist.gov`), 100 Bureau Drive, Mail Stop 8910, Gaithersburg, MD 20899, **Hans Volkmer** (`volkmer@uwm.edu`), EMS Building, Room E403, Milwaukee, WI 53201-0413, and **Michael Baeder** (`mabaeder@gmail.com`), 320 W. Foothill Blvd., Claremont, CA 91711. *Generalizations of generating functions for hypergeometric and q-hypergeometric orthogonal polynomials.*

In this talk, we present generalized generating functions for hypergeometric and q-hypergeometric orthogonal polynomials. These generalized expansions are obtained by re-expressing the polynomials in the generating functions using multi-parameter connection relations. The resulting multi-summation expressions are rearranged with justification in order to identify the coefficients of the generalized generating function expansions. The coefficients of these expansions are given in terms of generalized and basic hypergeometric series. We also produce definite integral relations by applying orthogonality to our generalized expansions. We give generalizations of generating functions for Gegenbauer, Jacobi, Laguerre, Wilson, continuous Hahn, continuous dual Hahn, Meixner-Pollaczek, q-ultraspherical/Rogers, q-Laguerre, and little q-Laguerre polynomials. (Received February 10, 2014)