

BRANCHING FORMULA FOR MACDONALD-KOORNWINDER POLYNOMIALS

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The six-parameter Macdonald-Koornwinder polynomials with hyperoctahedral symmetry form a multi-variate generalization of the well-known Askey-Wilson polynomials. We present a branching formula that expands the Macdonald-Koornwinder polynomials in $n+1$ variables in terms of the n -variable polynomials. This formula allows one to construct the Macdonald-Koornwinder polynomials explicitly by induction in the number of variables.

Joint work with Erdal Emsiz (Pontificia Universidad Católica de Chile, Chile).