FACTORIZATION OF THE HYPERGEOMETRIC-TYPE DIFFERENCE EQUATION ON THE UNIFORM LATTICE[*]

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Abstract. We discuss factorization of the hypergeometric-type difference equations on the uniform lattices and show how one can construct a dynamical algebra, which corresponds to each of these equations. Some examples are exhibited, in particular, we show that several models of discrete harmonic oscillators, previously considered in a number of publications, can be treated in a unified form.