1117-33-145 **Plamen Iliev\*** (iliev@math.gatech.edu), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332-0160. A Lie-theoretic interpretation of bispectral polynomials in several variables.

I will discuss a Lie-theoretic interpretation of multivariate analogs of the self-dual classical discrete orthogonal polynomials which can be used to derive their bispectral properties. This approach naturally leads to the construction of two commutative algebras of partial difference operators diagonalized by the polynomials: one consisting of operators acting on the variables of the polynomials, and a second algebra consisting of operators acting on the degree indices. (Received January 11, 2016)