Sparse Interpolation in Terms of Multivariate Chebyshev Polynomials Associated to a Weyl group
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Given a multivariate polynomial that can be evaluated at chosen point, sparse interpolation offers to first recover the support of this polynomial; Then the coefficients. The number of evaluations is a measure of complexity.

We examine the situation where the polynomial is assumed to consist of a small number of generalized multivariate Chebyshev polynomials associated to a Weyl group. We address the multivariate Chebyshev polynomials of the first and second kind in the same framework and with analogous numbers of evaluations.