1103-33-21  Vincent X Genest* (vincent.genest@umontreal.ca), Centre de recherches mathématiques, Université de Montréal, P.O. Box 6128, Centre-ville Station, Montréal, Québec H3C 3J7, Canada, and Luc Vinet. The multivariate Hahn polynomials as interbasis expansion coefficients for a superintegrable system.

In this talk, I will explain how Karlin and McGregor’s multivariate Hahn polynomials arise as the interbasis expansion coefficients in the $d + 1$-dimensional singular oscillator model. I shall moreover illustrate how this identification can be exploited to derive the properties of these polynomials. (Received July 20, 2014)