## 1037-43-264

Matthew B Stenzel\* (stenzel@math.ohio-state.edu), 1192 University Drive, Newark, OH 43055. Sampling Theorems on Symmetric Spaces of Non-compact Type.

We give an operator sampling theorem for rapidly decreasing radial functions on a Riemannian symmetric space G/K of non-compact type whose spherical Fourier transform has compact support. When G has a complex structure we can invert the sampling operator and recover such a function from its values on a certain discreet subset of G/K. (Received February 04, 2008)