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**Brian C. Hall\*** (bhall@nd.edu), Department of Mathematics, 370 Computing Center and Math. Building, Notre Dame, IN 46556. *A conjectural analog of the Stone-von Neumann theorem in the setting of Gross's generalized Fock space.* Preliminary report.

In 1993, Leonard Gross described an analog of the Hermite expansion for functions on a simply-connected compact Lie group  $K$ . This expansion gives rise to a unitary map from an  $L^2$  space over  $K$  to the generalized Fock space, which is a certain completion of the universal enveloping algebra of  $\text{Lie}(K)$ . There is also a third space, the generalized Segal-Bargmann space introduced by the author, that is also unitarily equivalent to the other two. The unitary maps among these three spaces can be described as the unique intertwining maps of certain natural creation and annihilation operators. In this talk I will describe a conjecture that “explains” the unitarity of these intertwining maps in terms of an identity involving the creation and annihilation operators. (Received September 26, 2000)