1023-47-1194 **D K Farnsworth*** (dkf@buffalo.edu), Deparment of Mathematics, University at Buffalo, Buffalo, NY 14209. *Determining the Membership of Hankel Operators in the Symmetrically-Normed Ideals of the Segal-Bargmann Space.* Preliminary report.

Let n be a positive integer. Consider the n-tuples of all complex numbers together with the Gaussian measure. Let H be the associated Hilbert space of square integrable functions. In this setting, we can define the subspace known as the Segal-Bargmann space and the corresponding family of Hankel operators. Among the ideals of the algebra of all bounded operators on H are the symmetrically-normed ideals, of which the Schatten classes are the most familiar. It is desirable to find, in terms of the symbol function, a criterion for a given Hankel operator to belong to a particular symmetrically-normed ideal. In this talk, I will present a recent result that yields such a criterion and which provides a complete answer to what might be called the associated two-sided classification problem. The work leading to this result is a generalization of previous work by J. Xia and D. Zheng, who obtained a similar result for the Schatten classes. (Received September 25, 2006)