

Meeting: 1007, Santa Barbara, California, SS 8A, Special Session on Geometry and Physics

1007-33-25 **Oleg A. Gleizer*** (oleg_gleizer@mac.com), 309 South Sherbourne Drive, Apt. 302, Los Angeles, CA 90048. *Symmetries of the m -hypergeometric function.*

Almost everyone would agree that the "most special" of all the special functions are the hypergeometric function mF_{m-1} and the P-function of Weierstrass. In this paper we discover an unexpected relation between them. Results of the paper are an "elliptization" of the results of Beukers and Heckman for the monodromy of $mF-1$. The main technique used in the paper is to realize hypergeometric functions as Fermionic fields. Analytic continuation is then replaced by the vacuum expectation value pairing. (Received December 07, 2004)