1070-30-101 **John Wermer*** (wermer@math.brown.edu), 128 Irving Ave, Providence, RI 02906. *Function Algebras on Levi flat Sets.* Preliminary report.

Let X be a compact 3-manifold with boundary, contained in C^2, such that X is exhausted by a family of finite Riemann surfaces S(t)where for each t bd(S(t)lies in bdX. A denotes the algebra of all functions f in C(X)such that for each t the restriction of f to S(t) is holomorphic on S(t). Let M be the maximal ideal space of A. Each point of X gives a point in M. Are there any other points in M? In "Function Theory on Certain 3-manifolds" (to appear) we showed that the answer is Yes when X has the equation: —w— = —G(z)—, (z,w)in the unit bidisk, with G holomorphic on the unit disk. John Anderson suggested that this result could be generalized.

Let H,K be holomorphic functions on the bidisk D(2). Put X = (z,W)— —H(z,w) = —K(z,w) on D(2). X is foliated by the Riemann surfaces:H(z,w)= K(z,w)exp(it) and A is defined as above. Conjecture: Let M be the maximal ideal space of A. Then M coincides with X. In this talk, we shall discuss partial results towards the conjecture. (Received February 02, 2011)