962-43-381 **Lewis A Coburn*** (lcoburn@acsu.buffalo.edu), Department of Mathematics, SUNY at Buffalo, 244 Mathematics Building, Buffalo, NY 14260. *Gabor localization and Berezin-Toeplitz operators.* Preliminary report.

The Gabor localization operator L[w, f], with "window" w on real Euclidean n-space R[n] and "symbol" f on complex n-space C[n] = R[2n], is naturally unitarily equivalent, via the Bargmann transform B, to an operator A[w, f] on the Segal-Bargmann space of Gaussian square-integrable entire functions on C[n]. When w is the normalized Gaussian on R[n], Bw = 1 and A[w, f] is exactly the much-studied Berezin-Toeplitz operator T[f]. The operators A[w, f] can be effectively studied for other interesting windows w. For example, when w is a Hermite function of degree one ( in x1, say) and f is any polynomial in the zj and their complex conjugates for j = 1,2....n , then A[w, f] = T[f + 2 D1f] where D1 is the Laplacian in z1 and its complex conjugate. (Received September 13, 2000)