

1015-32-89

**Howard Jacobowitz\*** ([jacobowi@camden.rutgers.edu](mailto:jacobowi@camden.rutgers.edu)), Mathematical Sciences Department, Rutgers University, Camden, NJ 08102. *Complex-valued functions and involutive structure*. Preliminary report.

We will present and relate results such as

Theorem 1. A manifold of dimension  $n$  has involutive sub-bundles

$$V_0 \subset V_1 \subset \cdots \subset CTM$$

with

$$\text{rank}_C V_j = \left[ \frac{n}{2} \right] + j.$$

Theorem 2 (with P. Landweber).  $M^{2n+k}$  has a generic immersion into  $C^{n+k}$  if and only if  $CT^*M = A \oplus B$  where  $A$  is the trivial complex bundle of rank  $n$  and  $B \cap \bar{B} = \{0\}$ . (Received January 27, 2006)