

Lista 3

Problem 2 Let M be a symplectic manifold, $\Psi = (\psi^1, \dots, \psi^k) : M \rightarrow \mathbb{R}^k$ a smooth map, and c a regular value. Consider a submanifold $N = \Psi^{-1}(c) \hookrightarrow M$.

- b. Show that N is symplectic if and only if the matrix (c^{ij}) , with $c^{ij} = \{\psi^i, \psi^j\}$, is invertible for all $x \in N$.