18.117 Problem Set #2

1. Check that the Fubini-Study metric is Kahler-Einstein with $\lambda = -(n+1)$.

2. Let $U = \{U_i, i \in I\}$ be a cover of X by pseudoconvex sets. Show that the Cech cohomology groups $H^q(U, \mathcal{A}^p)$ coincides with the cohomology groups of

$$\Omega^{p,0}(X) \xrightarrow{\ \bar{\partial}\ } \Omega^{p,1}(X) \xrightarrow{\ \bar{\partial}\ } \Omega^{p,2}(X) \xrightarrow{\ \bar{\partial}\ } \cdots$$