1154-46-674 **Valentin Deaconu*** (vdeaconu@unr.edu), Department of Math and Stat, University of Nevada, Reno, NV 89557-0084. *Group actions on C^*-algebras of a vector bundle.* Preliminary report.

We consider C^*-algebras constructed from compact group actions on complex vector bundles $E \to X$ endowed with a Hermitian metric. An action of G by isometries on $E \to X$ induces an action on the C^*-correspondence $\Gamma(E)$ over $C(X)$ consisting of continuous sections, and on the Cuntz-Pimsner algebra $\mathcal{O}_E$, so we can study the crossed product $\mathcal{O}_E \rtimes G$. If the action is free and rank $E = n$, then we prove that $\mathcal{O}_E \rtimes G$ is Morita-Rieffel equivalent to a field of Cuntz algebras $\mathcal{O}_n$ over the orbit space X/G. If the action is fiberwise, then $\mathcal{O}_E \rtimes G$ becomes a continuous field of crossed products $\mathcal{O}_n \rtimes G$. For transitive actions, we show that $\mathcal{O}_E \rtimes G$ is Morita-Rieffel equivalent to a graph C^*-algebra. (Received September 09, 2019)