

1077-VJ-2247 **Alice Rizzardo*** (rizzardo@math.columbia.edu). *On Fourier-Mukai type functors*. Preliminary report.

Orlov showed in 1997 that all exact, fully faithful functors $F : D_{Coh}^b(X) \rightarrow D_{Coh}^b(Y)$ with X and Y smooth projective are isomorphic to a Fourier-Mukai transform $Rp_{2*}(E \overset{L}{\otimes} (\cdot))$, where $E \in D_{Coh}^b(X \times Y)$. In this talk we will discuss a class of functors $D_{Coh}^b(X) \rightarrow D_{Coh}^b(Y)$ that are not full or faithful and still satisfy the above result. (Received September 21, 2011)