Seminari de Geometria Algebraica 2010/2011 (UB-UPC) Divendres 22 d'octubre a les 15 h. a l'aula T2 FM-UB http://atlas.mat.ub.es/sga

## Calabi-Yau 3-folds that are fibred by K3 surfaces

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Given X a K3 surface, any other K3 surface that is derived equivalent to X, corresponds to a moduli space of stable sheaves on it and these are determined by the corresponding Mukai vectors of invariants in the cohomology group of X. We consider fibrations of K3 surfaces, in particular those whose total space is a Calabi-Yau manifold and we define a dual fibration. We prove that both fibrations are derived equivalent.