1145-37-1760 Adam Kanigowski*, adkanigowski@gmail.com, College Park, MD. On the Bernoulli property for some partially hyperbolic systems.

We study the Bernoulli property for partially hyperbolic systems for which the central direction has zero exponents, but is not isometric. The main object of interest are skew products over Anosov diffeomorphisms with fibers of zero entropy. More precisely, let $A : M \to M$ be an Anosov map, (K_t) a weakly mixing flow on N and $\phi : M \to \mathbb{R}$ a smooth cocycle. We consider the skew product

$$A_{\phi}(x,y) = (Ax, K_{\phi(x)}(y)).$$

We provide sufficient conditions (on (K_t)) for A_{ϕ} to be Bernoulli and also give examples of (K_t) for which A_{ϕ} is not Bernoulli. (Received September 24, 2018)