1106-55-480 **Sam Nariman*** (nariman@math.stanford.edu), 736 Escondido Road #231, Stanford, CA 94305.

Homological stability of diffeomorphim groups made discrete.

We prove that group homology of the diffeomorphism group of $\#^g S^n \times S^n$ as a discrete group is independent of g in a range, provided that $n = 1$ or $n > 2$. For $n = 1$, this becomes homological stability of surface diffeomorphism groups with discrete topology which was first conjectured by Morita. The stable homology is isomorphic to the homology of a certain infinite loop space related to the Haefliger's classifying space of foliations. One geometric consequence of this description of the stable homology is a splitting theorem that implies certain classes called generalized Mumford-Morita-Miller classes can be detected on flat $(\#^g S^n \times S^n)$-bundles for $g \gg 0$. (Received August 29, 2014)