

1077-55-2256

Loring W. Tu* (loring.tu@tufts.edu), Department of Mathematics, 503 Boston Ave, Tufts University, Medford, MA 02155-7049. *Computing integrals using equivariant cohomology.*

Under suitable circumstances, the localization theorem in equivariant cohomology provides a powerful tool for converting an integral on a manifold with a group action to a finite sum. I will discuss the type of integrals that can be computed this way and give a few examples, for instance, the computation of characteristic numbers of a homogeneous space. (Received September 22, 2011)