

Integral self-maps of finite loop spaces

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Consider the classifying space BG of a compact Lie group, or more generally of a finite loop space. Understanding the space of self-equivalences of BG has a long history starting with the work of J.F. Adams and collaborators in the '70s, and reaching an apex in the '90 and '00 with the work of Jackowski-McClure-Oliver, and the subsequent classification of p -compact groups and finite loop spaces. It turns out however that the whole space of integral self-equivalences has some fascinating additional structure, involving both rational and p -adic information, which I'll try to describe in my lecture. This is joint work with Kasper Andersen.