Topology and Geometry Seminar

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An HKR theorem for factorization homology, and a related project in character theory



Date: Wednesday March 6, 2024 Time: 12:30 PM Room: CL 251

**Abstract:** This talk will primarily be on a generalization of the so-called "HKR theorem". The classical HKR theorem concerns two different ways of generalizing the notion of differential forms on a ring; the theorem asserts they agree. I will give a generalization of this theorem for ring spectra which will allow us to recalculate the factorization homology/higher THH of rational KU.

Time permitting, I will give an advertisement for the ongoing work which motivated the above result (you, yes you! could be my collaborator). I am interested in using K-theory and higher THH to write down maps such as the character of a representation and the Chern character. Written versions of both of these projects are available on my website at:

hariraumurthy.github.io

