

# DEFENSE OF THE DOCTORAL DISSERTATION

DEPARTMENT OF MATHEMATICS

“An HKR theorem for factorization homology”

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Monday, July 3, 2023

Time: 4:30 PM

Location: 258 Hurley Bldg.

Zoom Link:



Examination Committee:

Mark Behrens, Advisor

Stephan Stolz

Chris Schommer-Pries

Larry Taylor

## Abstract:

We prove a Hochschild-Kostant-Rosenberg theorem ("the HKR theorem") which computes the factorization homology of certain smooth commutative ring spectra. In doing so we fix and generalize a THH computation which was first conceived as the brainchild of McCarthy-Minasian. Included also is a direct application of our revised HKR theorem to the higher THH of rational KU.