

# COLLOQUIUM SERIES

Department of Mathematics & Statistics  
Sacramento State

## What's in the $B^A(G)$ ?

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*Abstract.* A common theme in mathematics is to package objects into algebraic structures such as a ring. From there, mathematicians study its unit group to learn more about the ring. In this talk, we will explore the  $A$ -Fibered Burnside Ring of a finite group  $G$  and an Abelian group  $A$ ,  $B^A(G)$ , a ring that is constructed to encode information about the group  $G$ , such as its subgroups, homomorphisms into  $A$ , and more. The goal of this talk will be to give a gentle introduction of what the  $A$ -Fibered Burnside Ring of a finite group is and to explore properties of its unit group.

Jennifer Guerrero graduated from Sacramento State with a Bachelor's degree in Mathematics in 2017 and a Master's degree in Mathematics in 2019. She is currently a PhD Candidate in Mathematics at UC Santa Cruz. At the end of the talk, she will spend some time sharing—and answering questions—about her journey from Sacramento State to graduate school at UC Santa Cruz.

Friday April 25 at 3:00PM  
Brighton 214