



**Speaker:** Laura Wells  
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2:30 PM

258 Hurley Hall

**Title:** G-equivariant factorization algebras

**Abstract:**

Factorization algebras are a mathematical tool used to encode the data of the observables of a field theory. There are various notions of factorization algebra: one can define a factorization algebra on the open subsets of some fixed manifold; or alternatively, one can define a factorization algebra on the site of all manifolds of a given dimension with specified geometric structure. In this talk I will outline a comparison between two such notions:  $G$ -equivariant factorization algebras on a fixed model space  $M$  and factorization algebras on the site of all manifolds equipped with a  $(G, M)$ -structure (given by an atlas of charts in  $M$  and transition maps in  $G$ ). I will introduce the definitions of these two concepts and then sketch the proof of their equivalence.