## BOSTON UNIVERSITY GEOMETRY SEMINAR

## Factorization algebras and the beta-gamma system

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Friday Nov. 18, 3-4 pm in MCS B21. Tea 2:45-3 in MCS 137.

**Abstract:** The notion of a factorization algebra aims to formalize the structure possessed by the observables of a quantum field theory. In this talk, I'll introduce this notion with a running example given by the beta-gamma system, a very simple conformal field theory. No prior knowledge of physics is required, and the emphasis will be on the example. At the end, if I have time, I will sketch how this example relates to chiral differential operators and Costello's recent construction of the Witten genus.