

Caltech Mathematical Physics Seminar
Fall 2008–09

Quantum Statistical Mechanics and Number Theory

MATILDE MARCOLLI
Caltech

Abstract. I will give an overview of some recent results on the interaction of quantum statistical mechanics and number theory, via noncommutative geometry, based on the example of the Bost–Connes quantum statistical mechanical system and some generalizations. (Based on joint works with Connes, Consani, and Ramachandran.)