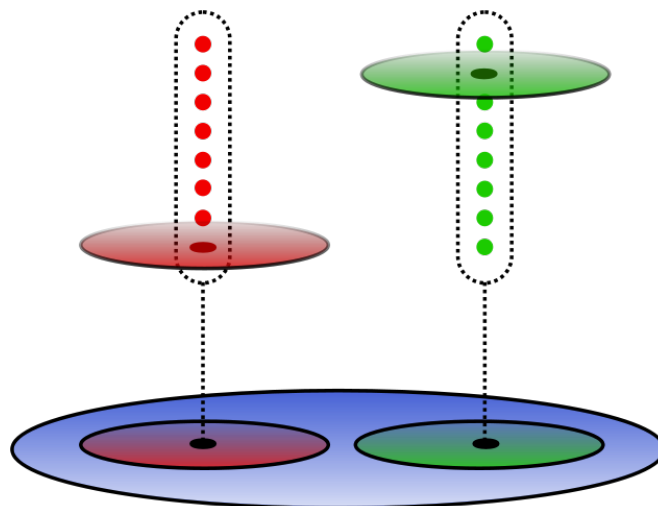


# *Graduate Mathematics Seminar*

## Infinity Topoi and Non-Commutative Iwasawa Theory

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**Abstract:** An elementary topos is a category which has finite limits, is locally cartesian closed, and has a subobject classifier. Informally, topoi are rich contexts in which we do homotopy theory, whose interpretation ranges from being a Grothendieck category of sheaves over a site to a Morita equivalence, in that they are as equally about geometry as higher order logic. Classical Iwasawa Theory describes the relation between zeta values and ideal class groups, thereby excitingly connecting analytic and arithmetic objects. In this talk, I will survey infinity topoi and Non-Commutative Iwasawa Theory and conclude with a discussion of my preliminary work on crystalline topoi.

*When:* Monday, February 10, 2020, 6:00 – 7:00 pm

*Where:* CSUCI, Sierra Hall 2411

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