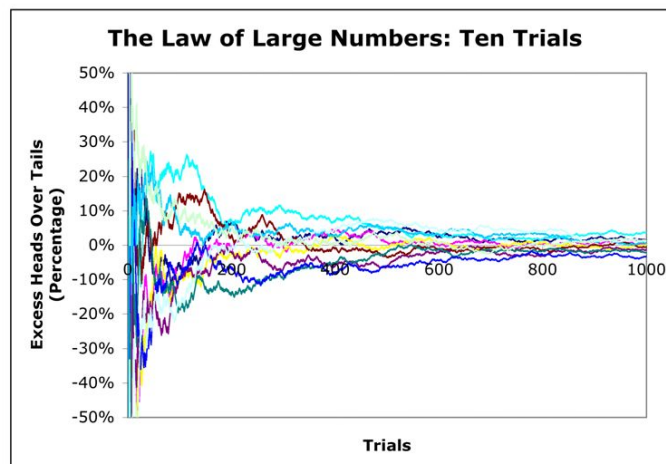


## *Graduate Mathematics Seminar*

### **Law of Large Numbers and the Markovian properties**

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**Abstract:** Markov Chains are a category of stochastic processes with an associated dependence structure. Their inception resulted from A. A. Markov's desire to disprove a rival's assertion concerning the application of Law of Large Numbers (LLN) to dependent variables. Markov's use of a classic Russian novel to illustrate a dependent relationship between vowels and consonants serves as motivation for investigating the extent to which the properties of these processes can be applied to other means of communication. This presentation summarizes the history of the Law of Large Numbers and the Markovian properties associated with three different aspects of communication.

*When:* Monday, November 25, 2019, 6:00 – 7:00 pm

*Where:* CSUCI, Sierra Hall 2411