

Friday, April 4, 2014, 4:00

COLLOQUIUM TALK

Speaker: Florin Boca

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Old Main 2231

Non-randomness of the Distribution of Rational Numbers (Stern-Brocot vs. Farey)

Abstract:

Rational numbers mod 1 (or equivalently roots of unity on the unit circle) can be generated via the mediant construction by using the Stern-Brocot “tree” or Farey sequences. Their distribution is related to some important problems in Mathematics. It turns out that rationals are NOT randomly distributed in any of these two filtrations. Non-randomness is related to three types of measure-preserving transformations, which can be elementarily defined and have interesting ergodic properties. This talk, aimed for a broad audience, will discuss this type of connections.

SNACKS IN FACULTY LOUNGE AT 3:30 PM.
EVERYONE WELCOME (EVEN IF YOU ARE UNABLE TO ATTEND THE TALK)
