

Pure Mathematics Seminar

Symbolic substitutions as automorphisms of the free group

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One-dimensional aperiodic sequences can be generated by substitutions like the Fibonacci substitution $a \rightarrow ab, b \rightarrow a$. Such a substitution can be viewed as an endomorphism of the free group over two letters. If this endomorphism happens to be invertible this leads to a convenient notion of the dual substitution. Two natural questions are (1.) which substitutions are self-dual, (2.) which compositions of different substitutions are equal? This talk answers both questions.

Date: **Friday, February 24, 2017**

Time: **12:00 pm**

Place: **Edinburg: EMAGC 1.302, Brownsville: BLIBR 2.206**

**The talk will delivered live at the *Brownsville* campus
and will be streamed to the Edinburg campus**

Coffee will be served.

For further information or for special accommodations, please contact Dr. Sergey Grigorian via email at [sergey.grigorian@utrgv.edu], or Dr. Alexey Garber at [alexey.garber@utrgv.edu], or visit the webpage <http://www.utrgv.edu/math/news-events/seminars/puremath/index.htm>