Pure Mathematics Seminar

Locally homology negligible sets in the Hilbert cube

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A closed subset for the Hilbert cube $I^\infty$ is locally homology negligible in $I^\infty$ if for every open set $U$ in $I^\infty$ and for every $n$ the relative homology group $H_n(U, U \setminus A)$ vanishes. According to an old result of N. Kroonenberg any finite-dimensional closed subset of $I^\infty$ is locally homology negligible in $I^\infty$. A compact space is called strongly infinite-dimensional if it admits an essential map onto the Hilbert cube, and weakly infinite-dimensional if it is not strongly infinite-dimensional. Recently, Kroonenberg’s result was generalized to some class of weakly infinite-dimensional subsets of $I^\infty$. We show that there are also strongly infinite-dimensional compacta which are locally homology negligible in $I^\infty$.

Date: Friday, February 26, 2016
Time: 3:00 pm
Place: Edinburg: MAGC 1.302, Brownsville: UBLB 2.206

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

Coffee and cookies 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