Pure Mathematics Seminar

Circle group action on manifolds with two isolated points

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The circle group is the multiplicative group of all complex numbers with absolute value 1. In this talk will be classified the circle group actions on manifolds with two isolated points. In particular, we prove that if a $2n-$dimensional manifold is stably complex and a non-trivial circle group action preserve this structure then $n = 1$ or 3. (Actually, it is a proof of Kosniowskis conjecture (1979) for $n < 5$.) Our proof relies on the Atiyah - Hirzebruch formula that reduces this problem to a certain polynomial equation. We will also discuss approaches to a proof of the Kosniowski conjecture. All proofs in this talk will be understandable for students.

Date: **Friday, September 9, 2016**
Time: **12:00 pm**
Place: **Edinburg:** MAGC 1.202, **Brownsville:** UBLB 2.206

The talk will delivered live at the *Brownsville* campus and will be streamed to the Edinburg 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`], or visit the webpage `http://www.utrgv.edu/math/news-events/seminars/puremath/index.htm`