Pure Mathematics Seminar

Euclidean and spherical representation of graphs

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Any graph G can be embedded in a Euclidean space as a two–distance set with the minimum distance equals a if the vertices are adjacent and distances equal b otherwise. The Euclidean representation number of G is the smallest dimension in which G is representable. In this talk we consider spherical and J - spherical representation numbers of G. We give exact formulas for these numbers using multiplicities of polynomials that are defined by the Caley-Menger determinant. We show that using W. Kuperberg's theorem the representation numbers can be found explicitly for the join of graphs

Date: **Friday, April 7, 2017**
Time: **10:00 am**
Place: **Edinburg:** EMAGC 1.320, **Brownsville:** BLIBR 2.206

The talk will delivered live at the *Brownsville* campus and will be streamed to the Edinburg campus. Note the new time and location!

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