

MATHEMATICS COLLOQUIUM

The kissing number problem

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Abstract: The kissing number problem asks for the maximal number $k(n)$ of equal size nonoverlapping spheres in n -dimensional space that can touch another sphere of the same size. This problem in dimension three was the subject of a famous discussion between Isaac Newton and David Gregory in 1694. In three dimensions the problem was finally solved only in 1953 by Schütte and van der Waerden.

In this talk we are going to give an overview of this problem, and to present our solution of a long-standing problem about the kissing number in four dimensions. Namely, the equality $k(4)=24$ is proved.

Date: Monday, **October 29, 2007**
Time: 3:00 pm – 4:00 pm
Place: J. Wiener Lecture Hall, MAGC 1.302

Refreshments will be served at 2:50pm.

For further information or for special accommodations, contact Dr. Karen Yagdjian at 381-2145, via email at yagdjian@utpa.edu, or visit www.math.panam.edu/colloquia.html