Pure Mathematics Seminar

Immediate Undergraduate and Graduate Research Topics in Number Theory

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The study of integer partitions begins with adding and counting. To put it simply, how many ways can we add positive integers, regardless of their order, to get to a given number? An example might be the best way to understand this question: How many sums of natural numbers are equal to 4?

$$4, \ 3+1, \ 2+2, \ 2+1+1 \ \text{ and } \ 1+1+1+1.$$

The answer is five and we write $p(4) = 5$ to indicate that there are five partitions of 4. What is $p(5)$? Can you compute $p(6)$, $p(10)$ or even $p(28)$? Is there a formula for $p(n)$?

Mathematicians have been studying integer partitions since the middle of the 18th century. Despite a very simple premise and a long history of research, there remain many open problems and areas of inquiry in the study of integer partitions.

The purpose of this presentation is to reintroduce the research interests of the speaker to the UTRGV campus and to invite curious students and faculty to collaborate in research on the ideas presented.

Date: **Friday, October 2, 2015**
Time: **11:00 am**
Place: **Edinburg:** MAGC 1.302, **Brownsville:** UBLB 3.102

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], or visit the webpage [http://blue.utb.edu/dg2012/puremathseminar.html].