Stony Brook Math Club
and Graduate Student Seminar

Wednesday, February 3, Math P-131

This is the third of a series of meetings of the Stony Brook Math Club aimed to give under-graduate students a glimpse of actual math research and math related activities. If you are curious about and/or interested in math, do not hesitate to come.

12:50-1:45pm Jeremy Kahn, *A simple proof of the Vaan der Waarden theorem*

Van der Waarden's theorem says that if you color the integers with finitely many colors, than you can find arbitrarily long monochromatic arithmetic progressions. It follows from the Hales-Jewett theorem, which is similar, but less about arithmetic and more about combinatorics.

I will state the "Multidimensional Hales-Jewett Theorem" and describe how it can be proved, in a few lines, by a multiple induction.

1:45-2:15pm *Pizza social*

Jeremy Kahn is a faculty member at the Department of Mathematics and the local Putnam guru whose mathematical knowledge transcends many fields. If number theory does not amaze you enough, ask him about fractals during the pizza social.

Questions? E-mail Moira Chas at moira@math.sunysb.edu