# Math Club Colloquium

## Quantum Computing and Linear Algebra

#### Speaker – Dr. Noson Yanofsky

### Brooklyn College Computer and Information Science

Abstract: Quantum computing is a new and exciting field that tries to harness the strange and wonderful aspects of quantum mechanics to make computers better. Surprisingly, a large part of quantum computing can be simply understood with the knowledge of manipulating matrices with complex numbers. We will show the connection between complex linear algebra and quantum computing. We will start with small physical systems and explain what they have to do with computers. We will move on to give a small lesson in quantum mechanics. We will conclude with a simple algorithm for quantum computing.

Date: Tuesday Oct 21, 2014 12:30-1:30pm

**Location: 1127N** 

E-mail: bcmathclub@gmail.com

**President: Neno Fuller** 

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**Faculty Advisor: Professor Kingan** 

# **BC Math Club Presents**