

Virtual Math Colloquium Purdue, Nov 3, 2020, 3:30 pm

Zhenghan Wang, Dept. of Mathematics, UC Santa Barbara

Title:

Quantum mathematics: counting, computing, and reasoning with quantum numbers

Abstract:

We count things with numbers classically. But in the quantum world, such as electrons in a material, the distinction between one thousand electrons and two more could be blurred by quantum superposition. As a result, quantum counting is better done using wave functions. It turns out that information can be processed much more efficiently using wave functions on quantum computers. I will explain the basics of wave functions, quantum computing, and speculate on implications for future mathematics.

Join Zoom Meeting

<https://us02web.zoom.us/j/>

Meeting ID: 867 3170 5103

Passcode: e2Fidw