The Math Colloquium
Department of Mathematics
San José State University

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Resonances in Scattering by Two Magnetic Fields at Large Separation and a Complex Scaling Method

November 6, 2013, MH320

Abstract: The Aharonov-Bohm Effect is considered one of the most important phenomena of quantum mechanics. We investigate the influence of the Aharonov-Bohm Effect on the resonances in magnetic scattering in two dimensions. A powerful tool in studying resonances without a magnetic field has been the method of complex scaling. That traditional method does not work for our model, however, and we invent a new complex scaling method, which we use in our analysis. This is joint work with Hideo Tamura from Okayama University in Japan.

Background: A first course in real analysis. No background in physics will be assumed.

About the speaker: Ivana Alexandrova received her Ph.D. at UC Berkeley and is an assistant professor at the University at Albany. She has also held positions at the Institut des Hautes Etudes Scientifiques and the University of Paris 11 in France, as well as at the University of Tokyo. Her current research is in partial differential equations.

Snacks in MH331B at 2:30 pm
Talk starts at 3 pm

For more information, see our full schedule at:

`http://www.math.sjsu.edu/~hsu/colloq/`