

Calderón-Zygmund Analysis Seminar

Monday, May 3rd, 3:45 pm

Landis' conjecture on the decay of solutions to Schrödinger equations on the plane

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Abstract. We consider a real-valued function on the plane for which the absolute value of the Laplacian is bounded by the absolute value of the function at each point. In other words, we look at solutions of the stationary Schrödinger equation with a bounded potential. The question discussed in the talk is how fast such function may decay at infinity. We give the answer in dimension two, in higher dimensions the corresponding problem is open.

The talk is based on the joint work with A. Logunov, N. Nadirashvili, and F. Nazarov.