Einladung zum Institutskolloquium

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spricht über

Calogero type bounds in two dimensions.

Abstract: Bounds on the number of negative eigenvalues for a Schrödinger operator $-\Delta - V$ on $L^2(\mathbb{R}^d)$, $d \geq 3$ are provided from above by the $L^{d/2}(\mathbb{R}^d)$-norm of the potential V (CLR inequality). In dimensions one and two there is an absence of such results since arbitrarily weak attractive potentials always induce a bound state. In this talk, we will show that such inequalities hold in two dimensions for certain operators with extra repulsive factors, e.g. an Aharonov-Bohm magnetic field. Our results rely on a new variational proof of Calogero's bound, which we extend to operator-valued potentials.

Wann: **Dienstag, 15. November 2022, 14:00 Uhr**

Wo: **Raum 8.526, Pfaffenwaldring 57, 70569 Stuttgart**

Interessenten sind herzlich eingeladen!