

Mathematisches Oberseminar *PDG und Spektraltheorie* (WiSe 2013/14).

Date: 19.12.2013.

Time and place: 14:15 in B 134.

Speaker: Rupert Frank (Caltech).

Titel: *Strichartz inequality for orthonormal functions.*

Abstract:

We prove a Strichartz inequality for a system of orthonormal functions, with an optimal behavior of the constant in the limit of a large number of functions. The estimate generalizes the usual Strichartz inequality, in the same fashion as the Lieb-Thirring inequality generalizes the Sobolev inequality. As an application, we consider the Schrödinger equation in a time-dependent potential and we show the existence of the wave operator in Schatten spaces.

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