Transition space for the continuity of the Lyapunov exponent of quasiperiodic Schrödinger cocycles

Lingrui Ge

UC Irvine

Abstract. We construct discontinuous point of the Lyapunov exponent of quasiperiodic Schrödinger cocycles in the Gevrey space $G^s$ with $s > 2$. In contrast, the Lyapunov exponent has been proved to be continuous in the Gevrey space $G^s$ with $s < 2$. This shows that $G^2$ is the transition space for the continuity of the Lyapunov exponent.