

Contribution Title:	LIEB-ROBINSON BOUNDS FOR QUANTUM LATTICE DYNAMICS AND APPLICATIONS
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Invited speaker:	Topical session
YRS seminar:	NO

Lieb-Robinson bounds demonstrate the existence of a finite speed of propagation of the effect of perturbations in spatially extended systems. Equivalently, they show that the diameter of the essential support of a local observable increases with time no faster than with a bounded speed. We review recent proofs of Lieb-Robinson bounds for spin systems and lattice systems of coupled oscillators and discuss several applications.