



The Abdus Salam
International Centre for Theoretical Physics



School on
NEW TRENDS IN QUANTUM DYNAMICS AND ENTANGLEMENT
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MANY BODY PHYSICS FROM A QUANTUM INFORMATION PERSPECTIVE

2. Area Laws in a Nutshell

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Abstract:

In this lecture, I will use the familiar concepts about entanglement from Quantum Information Theory to discuss area laws, i.e. laws that characterize correlations and entanglement in physically relevant many body states, and allow to make general statements about computational complexity of the corresponding Hamiltonians.