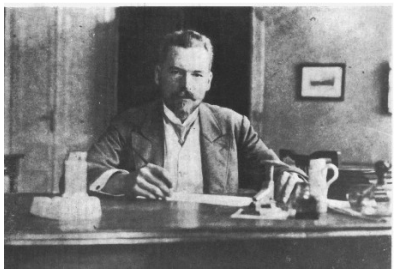

Contribution ID: **10** Type: **Regular Talk**

Many-body localization and the thermodynamic limit

Monday, September 25, 2023 10:05 AM (25 minutes)

Many-body localization (MBL) seems to be a robust example of ergodicity breaking. While manifested in small systems and for short times (in experiment) its very existence in the thermodynamic limit has been questioned recently. I will discuss recent efforts to answer this query by various means from exact diagonalization to large systems dynamics using tensor network approaches, the role of symmetries and conservation laws. Different types of disorder will be discussed as well as systems without disorder (if time permits). The talk is based on several recent papers, notably PRB 105, 224203 (2022) and PRB 107, 115132 (2023).

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Session Classification: Session 2