

コヒーレント光科学セミナーのご案内：4月23日（月）

このたびハーバード大学の Renate Landig 研究員をお招きして、下記のセミナーを開催いたします。

コヒーレント光科学セミナー

日時：4月23日（月）10:40~12:10

場所：西7号館7階大会議室（718）

講演者：Renate Landig（米国ハーバード大学博士研究員）

題目：Time crystals in strongly interacting dipolar spin systems lattice 講演要旨：

The interplay between periodic driving, disorder, and strong interactions has been predicted to result in exotic time crystalline phases, which spontaneously break the discrete time-translation symmetry of the underlying drive. In this talk, I will present the experimental observation of such discrete time crystalline order in a driven, disordered ensemble of about one million dipolar spin impurities in diamond at room temperature. We observe long-lived temporal correlations, experimentally identify the phase boundary and find that the temporal order is protected by strong interactions. We quantitatively explain these observations using resonance counting, which reveals critically slow thermalization dynamics as the origin of the observed long lived order.

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