



## ORTVAY KOLLOKVIUM // Ortway Seminar Series

2017. március 2. csütörtök 15:00-kor  
2nd March 2017., Thursday 3pm

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### Dynamical confinement in out-of-equilibrium quantum systems

#### Abstract:

Non-equilibrium quantum systems have recently come to the fore in theoretical physics, mainly due to the rapid development of experimental techniques. The interest is partly motivated by fundamental theoretical problems: what are the conditions for a closed non-equilibrium quantum system to evolve towards an equilibrium, and what is the nature of an eventual equilibrium state? Another reason is that a large number of exotic quantum phenomena, hitherto only predicted or known theoretically, have been realised in the lab, which allows for directly comparing the models to physics reality.

In this lecture I present a new result, which on the one hand points to a surprising phenomenon in the framework of an especially simple model. On the other hand it turned out that the findings are explained in terms of a statistical physics analogue of quark confinement known from the theory of strong interactions.

#### Reference:

M. Kormos, M. Collura, G. Takács and P. Calabrese: Real time confinement following a quantum quench to a non-integrable model, Nature Physics (2016) doi:10.1038/nphys3934

Free reading access: <http://rdcu.be/mqBn>

Minden érdeklődőt szívesen látunk! Az előadás előtt negyed órával az előadóban teát szolgálunk fel.

All visitors are welcome. Tea and biscuits are served 15 min prior the lectures at the location.

**Helyszín:** ELTE Pázmány Péter s. 1/A alatti épületében a földszinti 0.81 (Ortway) terem.

**Location** Lágymányos Eötvös Campus (address: Pázmány Péter s. 1/A), Northern Building, Room Ortway (0.81).

Az előadás-sorozatról az interneten az "[ortvay-koll.elte.hu](http://ortvay-koll.elte.hu)" címen található információ.

Further information available at the "[ortvay-koll.elte.hu](http://ortvay-koll.elte.hu)" website.