



Du  
**14**  
SEPT.  
2020  
au  
**18**  
DÉC.  
2020

08h30  
-  
18h30

## **2020-T3 SYSTEMS OUT OF EQUILIBRIUM**

### **Systems out of equilibrium, Paris**

IHP  
Amphitheater Darboux  
11 rue Pierre et Marie Curie  
75005 Paris

INSCRIPTION

### **Thematic trimester program at Institut Henri Poincaré, Paris**

**Systems out of equilibrium : Interplay between statistical, quantum and disordered dynamics.**

**14 Septembre, 2020 - 18 Décembre, 2020**

The aim of this program is to contribute to the development of a theory of non-equilibrium phenomena. It will address the interplay between the classical and quantum dynamics of many body physical systems evolving out of equilibrium. Traditionally, research in classical and quantum systems has remained separated, the two communities having slightly different goals and using distinct methodologies. Recent outstanding theoretical and experimental developments in both areas show that it is timely to bridge the gap and assemble these two groups of researchers.

URL of the page: <https://www.ihp.fr/fr/agenda/systems-out-equilibrium-paris>

**When visiting the IHP during this programme, please follow the IHP sanitary rules.**

**The activity programme:**

The conferences and courses of this program will also be accessible online at [www.ihp.fr/live](http://www.ihp.fr/live) .

**Long courses :**

-- **Fabian Essler:** "*Thermalization in Integrable Models*". Wed. 30/09, Wed. 07/10, Wed. 14/10, Wed. 21/10, Wed. 28/10 at 10:00-11:30. Amphi Darboux or online at [www.ihp.fr/live](http://www.ihp.fr/live) .  
=> Here are the links to the videos: [video-1](#) , [video-2](#) , [video-3](#) , [video-5](#) , (the video-4 is missing).

-- **Mark Srednicki:** "*Eigenstate thermalization hypothesis*". Thu. 22/10, ~~Thu. 29/10~~, Thu. 05/11, Thu. 12/11, Thu. 19/11 at 17:00-18:30. The lecture of Thu. 29/10 has been canceled, the series of lectures will resume on Thu. 05/11 and an extra lectures will be added on Thu. 19/12. The lectures will be given remotely via Zoom. The link will be announced later, in due time. A projection will be organised in the amphi Darboux.

=> Here are the links to the videos: [video-1](#) , [video-2](#) , [video-3](#) , [video-4](#) .

-- **Giulio Biroli:** "*Glassy behavior out of equilibrium*". ~~Mon. 09/11, Mon. 16/11, Mon. 23/11, (Mon. 30/11, optional)~~ at 10:00-11:30. Canceled.

-- **Denis Bernard:** "*Markovian dynamics in open quantum systems*". ~~Wed. 18/11, Wed. 25/11, Wed. 02/12~~ at 10:00-11:30. Canceled.

-- **Herbert Spohn:** "*Hydrodynamics of the Toda lattice, classical and quantum*". ~~Thur. 05/11 at 15:30-16:30~~. Canceled.

**Seminars :**

Here is the list of the seminars given by the programme participants. The seminars are going to take place in the Amphi Darboux in the first floor at the IHP. Unless exception, they will be planned on Monday, Wednesday or Friday mornings. The list will be up-dated each week (stay tuned....):

- **Alvise Bastianello**: "Adiabatic bound-state formation in the 1d Bose gas". Monday 28/09, at 10:00, Amphi Darboux.
- **Etienne Granet**: "A systematic 1/c expansion of form factor sums for dynamical correlations in the Lieb-Liniger model". Friday 02/10, at 10:00, Amphi Darboux.
- **Andrea De Luca**: "Heating and thermalization in generalized hydrodynamics". Friday 09/10, at 10:00, Amphi Darboux. CANCELED.
- **Tomaz Prosen**: "Exactly solved models of many-body quantum chaos". Monday 12/10, at 10:00, Amphi Darboux. Here are the link to the [video](#).
- **Jacopo De Nardis**: "KPZ dynamics in 1-dimensional chains: superuniversality and quantum-classical correspondence". Friday 16/10, at 10:00, Amphi Darboux.
- **Tomaz Prosen**: "Integrable Matrix Models in Discrete Space-Time: Super-universality of Anomalous Transport". Monday 19/10, at 10:00, Amphi Darboux.
- **Denis Bernard**: Informal Discussion "Q-SSEP & its cousins". Wednesday 21/10, at 15:00, Amphi Darboux.
- **Andrea Trombettoni**: "Floquet Hamiltonian for a Periodically Tilted 1D Gas". Friday 23/10, at 10:00, Amphi Darboux.
- **Tomaz Prosen**: "Route 54". Monday 26/10, at 10:00, Amphi Darboux. Here is the link to the [video](#).
- **Andrea De Luca**: "Heating and thermalization in generalized hydrodynamics". ~~Friday 30/10, at 10:00, Amphi Darboux.~~
- **Giuseppe Mussardo**: Informal seminar: "Mertens functions & the Riemann hypothesis", ~~Friday 30/10, at 14:30, Amphi Darboux~~
- **Herbert Spohn**, "Hydrodynamics of the Toda lattice, classical and quantum". ~~Thur. 05/11 at 15:30-16:30.~~
- The next seminar....

The LPENS, alias the Laboratory of Physics of the Ecole Normale Supérieure, organizes a **"Forum of Statistical Physics @ ENS"** on some Wednesdays at 12:00. You are welcome to attend. See [the Forum webpage](#) for more information.

### Workshop :

The conference "Frontiers in out of equilibrium dynamics of many-body systems" to be held at the Institut Poincaré from **the 2nd to the 6th of November 2020.CANCELED.**

We plan to have lectures only during the morning in the Amphi Hermite to ensure social distancing between participants.

See the programme. **CANCELED.**

### List of participants (with presence dates) :

Here is the [list of participants](#) with their presence dates.

Due to the present sanitary situation, this list may evolve in time. If you want to contact a participant, please check with her/him if she/he is actually present.

### Comité d'organisation scientifique :

- Denis Bernard, CNRS & ENS Paris (France)
- Leticia F. Cugliandolo, Sorbonne Université (France)
- Giuseppe Mussardo, SISSA (Italy)

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## **INSTITUT HENRI POINCARÉ - UAR839**

Sorbonne Université / CNRS  
11 rue Pierre et Marie Curie  
75231 Paris Cedex 05

### **HORAIRES**

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.