

ENTROPY WITHOUT THE HOT AIR

KITS / IoP / CECAM DISCUSSION MEETING Beijing, August 5-7 2018

Organizing Committee:

Daan Frenkel, University of Cambridge, UK; *Ignacio Pagonabarraga*, CECAM, Switzerland; *Rudi Podgornik*, UCAS CAS Beijing; *Jure Dobnikar*, IoP CAS Beijing

The probabilistic framework of Statistical Mechanics can be used to describe systems that are not in equilibrium or even not material systems if we use the concept of 'entropy' beyond 'Boltzmann-Gibbs' statistical mechanics. Examples of non-thermal entropies are, among others, *Information* and *Granular Entropy*. We will discuss how they can be treated under a unified framework and explore how machine learning can be used to identify such entropy descriptors.

The aim of the discussion meeting is to assess the current state-of-the-art in this (still fragmented) field and identify possible fruitful topics for a future full-scale workshop.

INVITED SPEAKERS: *Rafi Blumenfeld* (Cambridge), *Sri Sastry* (Bengaluru), *Alpha Lee* (Cambridge), *Roy Beck-Barkai* (Tel Aviv), *Limei Xu* (Peking University), *Ke Chen* (IoP), *Erika Eiser* (Cambridge), *Fangfu Ye* (IoP), *Erik Luijten* (Northwestern), *Masao Doi* (Beihang), *Mincheng Yang* (IoP), *Jiajia Zhou* (Beihang), *Tine Curk*, *Li Tao*, *Yang Cheng*, *James Farrell*, *Arman Boromand* (IoP)

LOCATION: **M building, Room 253**

Workshop secretary: **Xie Zhaoping** (IoP CAS): zpxie@iphy.ac.cn

Sunday, August 5 th		Monday, August 6 th		Tuesday, August 7 th	
		09:00-09:45	Daan Frenkel	09:00-09:45	Erika Eiser
		9:45-10:30	Ignacio Pagonabarraga	09:45-10:30	Rudi Podgornik
		10:30-11:00	<i>COFFEE BREAK</i>	10:30-11:00	<i>COFFEE BREAK</i>
		11:00-11:45	Michael Murrell	11:00-11:45	Erik Luijten
		11:45-12:30	Penger Tong	11:45-12:30	Shuji Ishihara
		12:30-14:00	<i>LUNCH BREAK</i>	12:30-14:00	<i>LUNCH BREAK</i>
		14:00-14:45	Alpha Lee	14:00-14:45	Masao Doi
		14:45-15:30	Roy Beck-Barkai	14:45-15:30	Ke Chen
		15:30-16:00	<i>COFFEE BREAK</i>	15:30-16:00	<i>COFFEE BREAK</i>
		16:00-17:30	Tao Li James Farrell Cheng Yang	16:00-17:30	Mingcheng Yang Jiajia Zhou Tine Curk
15:00-15:15	OPENING WORDS	17:30-18:00	ROUND TABLE	17:30-18:00	ROUND TABLE
15:15-16:00	Rafi Blumenfeld	19:00-22:00	<i>DINNER</i>	19:00-22:00	<i>DINNER</i>
16:00-16:45	Sri Sastry				
16:45-17:30	Limei Xu				
17:30-18:00	ROUND TABLE				
19:00-22:00	<i>DINNER</i>	19:00-22:00	<i>DINNER</i>	19:00-22:00	<i>DINNER</i>