

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	COFFEE BREAK	10:30-11:00	COFFEE BREAK
		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	LUNCH BREAK	12:30-14:00	LUNCH BREAK
		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	COFFEE BREAK	15:30-16:00	COFFEE BREAK
		16:00-17:30	Tao Li James Farrell Cheng Yang	16:00-17:30	Mingcheng Yang Jiajia Zhou Tine Curk
15:00-15:15	ARRIVAL/COFFEE	17:30-18:00	ROUND TABLE	17:30-18:00	ROUND TABLE
15:15-16:00	OPENING WORDS	19:00-22:00	DINNER	19:00-22:00	DINNER
16:00-16:45	Rafi Blumenfeld				
16:45-17:30	Sri Sastry				
17:30-18:00	Limei Xu				
19:00-22:00	ROUND TABLE				