

# Cascading Disasters: Theory, Methods and Empirics

## International workshop

November 28-29 2018

Technion, Israel Institute of Technology, Israel

### Day 1 November 28<sup>th</sup>

*Faculty of Architecture and Town planning, Amado building, room 232*

**09:00 – 09:30 Reception and coffee**

**09:30 - 09:45 Introduction and Welcome**

Deborah Shmueli (Haifa University), Pnina Plaut (Technion)

**09:45 – 11:15 Session 1: Understanding Cascading Disasters**

- **David Alexander**, University College, London: *Understanding Cascading Disasters: A Framework for Analysis*
- **Shlomo Havlin**, Bar Ilan University: *Cascading Failures and Recovery in Interdependent Infrastructures*
- **Yakov Ben Haim**, Technion Israel Institute of Technology: *Dynamics of cascading failure from an information-gap perspective*

**11:15 - 11:30 Coffee Break**

**11:30 – 13:00 Session 2: Social, Health and Planning**

- **Deborah Thomas**, University of North Carolina: *Using health (in)equity to gauge social vulnerability and potential for cascading disasters*
- **Ben Sachs**, Technion and Tel Aviv University Faculty of Medicine: *Crises and Turnaround Management: Lessons Learned from Recovery of New Orleans and Tulane University Following Hurricane Katrina.*
- **Scira Menoni**, Politecnico di Milano: *A systemic approach to deal with enchain failures and damages triggered by natural hazards in complex urban environments*

**13:00 - 14:00 Lunch**



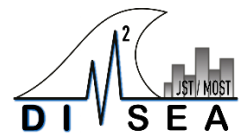
### 14:00 – 15:30 Session 3: Infrastructure and Physical Damage

- **Erick Mas**, IRIDES, Tohoku University: *Large-scale damage assessment and evacuation feasibility in cascading disasters*
- **Hillel Bar Gera**, Ben Gurion University: *Scheduling Road Network Recovery in Cascading Disasters*
- **Luis Moya**, IRIDES, Tohoku University: *Building damage detection from multiple disasters by fusion of remote sensing and numerical simulation of demand parameters*

### 15:30 - 15:45 Coffee Break

### 15:45 – 17:15 Session 4: Socio-Economic Modeling

- **Joanne Bayer**, IIASA Laxenburg: *Assessing cascading disaster losses with an agent-based model: an application to floods in Austria*
- **Shlomo Mizrachi**, Haifa University: *Cascading Disasters, Information Cascades and Continuous Time Models of Domino Effects*
- **Daniel Felsenstein**, Hebrew University: *Cascading Disasters and Labor Market Outcomes*



## Day 2 November 29<sup>th</sup> Open Conference

*Mechanical Engineering Faculty, Kahn building, auditorium 6*

Detailed program will be distributed later.

09:00 – 09:30 Coffee

09:30 – 13:30

13:30 – Light lunch

14:30 – 17:30

- Visit to the Haifa emergency center.

As the number of visitors is limited early registration is needed. If you wish to join the visit please send email soon (first come first served basis) to [bmichal@geo.haifa.ac.il](mailto:bmichal@geo.haifa.ac.il)