Workshop
Urban Physics

March 1, 2016
MIT Media Lab E14-674
75 Amherst Street
Cambridge, MA 02139

Organizers: T. Emig, R. Pellenq, F.-J. Ulm

Morning program

8:00 Registration
8:30 Welcome
   R. Pellenq (Head UMI, MIT)
   F. Chevalier (Founder, TheCamp)
   B. Widdig (Director International Affairs MIT)
   V. Freland (Consul of France, Boston)

Session 1: Urban Challenges
9:00 L. Bettencourt (Santa Fe Institute)
   The Many Uses of Physics in the Study of Cities
9:30 C. Kontokosta (CUSP, NYU)
   The Quantified Community
10:00 J.-P. Bailly (thecamp)
   thecamp: an innovation ecosystem to transform people, organizations and cities
10:30 P. Dumas (Polytech Marseille)
   Smart grids and urban physics
10:45 T. Kemper (EU Commission)
   Mapping and Monitoring Cities from Space - the Global Human Settlement Layer
11:00 Coffee

Session 2: Mobility
11:30 M. Gonzalez (MIT)
   Data Science to tackle Urban Challenges in Transportation and Energy
12:00 M. Schrekenberg (Univ. Duisburg-Essen)
   Urban Road Traffic: Data, Models and Management
12:30 M. Akbarian (MIT)
   Carbon Management of Pavement Infrastructure using Data Analytics of pavement Life Cycle Impacts
12:45 "Rapid Fire" Presentations for Posters

Afternoon program

1:00 Lunch

Session 3: Energy and Climate
2:00 C. Reinhart (MIT)
   Urban energy systems - Towards more sustainable city and neighborhood design
2:20 M. Ghandehari (CUSP, NYU)
   Persistent and Synoptic Phenomenology — Cities from Rooftops
2:40 B. Vant Hull (CUNY)
   Validation of a Spatially Fine Scale Statistical Urban Air Temperature Model
3:00 G. Dobler (CUSP, NYU)
   Better Cities through Imaging
3:20 F. O’Sullivan (Energy Initiative, MIT)
   The rise of distributed energy and the challenges ahead
3:45 Coffee

Session 4: Human Aspects
4:15 E. Ackermann (MediaLab, MIT)
   Building better cities: Forget smarts! Focus on mood!
4:45 Y. Bar-Yam (New England Complex Systems Institute & MIT)
   Human Urban Dynamics

Session 5: Synthesis
5:30 H. van Damme (UMI, MIT)
5:45 F. O’Sullivan (Energy Initiative, MIT)
6:00 R. L. Jaffe (Physics Dept., MIT)
7:00 Wine and cheese reception