NetMob 2015 Program

7-10 April 2015
MIT MediaLab
http://netmob.org

School // Conference // D4D Challenge

Editors: Esteban MORO, Yves-Alexandre de MONTJOYE, Vincent BLONDEL, Alex 'Sandy' PENTLAND, Nicolas DE CORDES

March 25th version

Organized by

Universidad Carlos III de Madrid

MIT

UCL Université catholique de Louvain

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RealImpact ANALYTICS

Netmob Organizers

Co-chair: Esteban Moro, Universidad Carlos III de Madrid, Spain
Co-chair: Vincent Blondel, Université Catholique de Louvain, Belgium
Co-chair: Alex 'Sandy' Pentland, MIT Media Lab
Co-chair: Yves-Alexandre de Montjoye, MIT Media Lab

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Karl Aberer, EPFL, Switzerland
Rein Ahas, University of Tartu, Estonia
Francesco Calabrese, IBM Research, Ireland
Manuel Cebrián, NICTA, Australia
Augustin Chaintreau, Columbia University, USA
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Massimo Colonna, Telecom Italia, Italia
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János Kertész, Budapest University of Technology & Economics, Hungary
Gautier Krings, Real Impact Analytics, Belgium
Renaud Lambiotte, University of Namur, Belgium
Rubén Lara, Mobily, Saudi Arabia
David Lazer, Northeastern University, US
Sune Lehmann, Technical University of Denmark, Denmark
Miguel Luengo, UN Global Pulse, US
Cecilia Mascolo, University of Cambridge, UK
Veena Mendiratta, Bell Labs Alcatel-Lucent, US
Giovanna Miritello, Zed, Spain
Mirco Mucolesi, University of Birmingham, UK
Jukka-Pekka Onnela, Harvard University, US
Nuria Oliver, Telefónica Research, Spain
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Daniele Quercia, Yahoo Labs, Spain
Pablo Rodriguez, Telefónica Research, Spain
Jari Saramäki, Aalto University, Finland
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Zbigniew Smoreda, Orange Labs, France
Pål Sundsøy, Telenor, Norway
Pedro Zufiria, Universidad Politécnica de Madrid, Spain

D4D Scientific Committee

Elizabeth Belding, UC Santa Barbara, US
Vincent Blondel, UCL, Belgium, Chairman of the D4D Committee
Nicolas Demassieux, Orange Labs, Paris, France
Ngala Djitte, Gaston Bergé University, St Louis, Senegal
Tim Hayward, GSMA, London, UK
William Hoffman, World Economic Forum, New York, US
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Omar N'Diaye, Sonatel, Dakar, Senegal
Alex (Sandy) Pentland, Medialab, MIT, Boston , USA
Marie-Claude Sance-Plouchart, Research Engineer, INRIA
Bhen Sikina Toguebaye, Université Cheik Anta Diop de Dakar
Nicolas de Cordes, Orange, D4D Committee Coordinator

NetMob Program overview

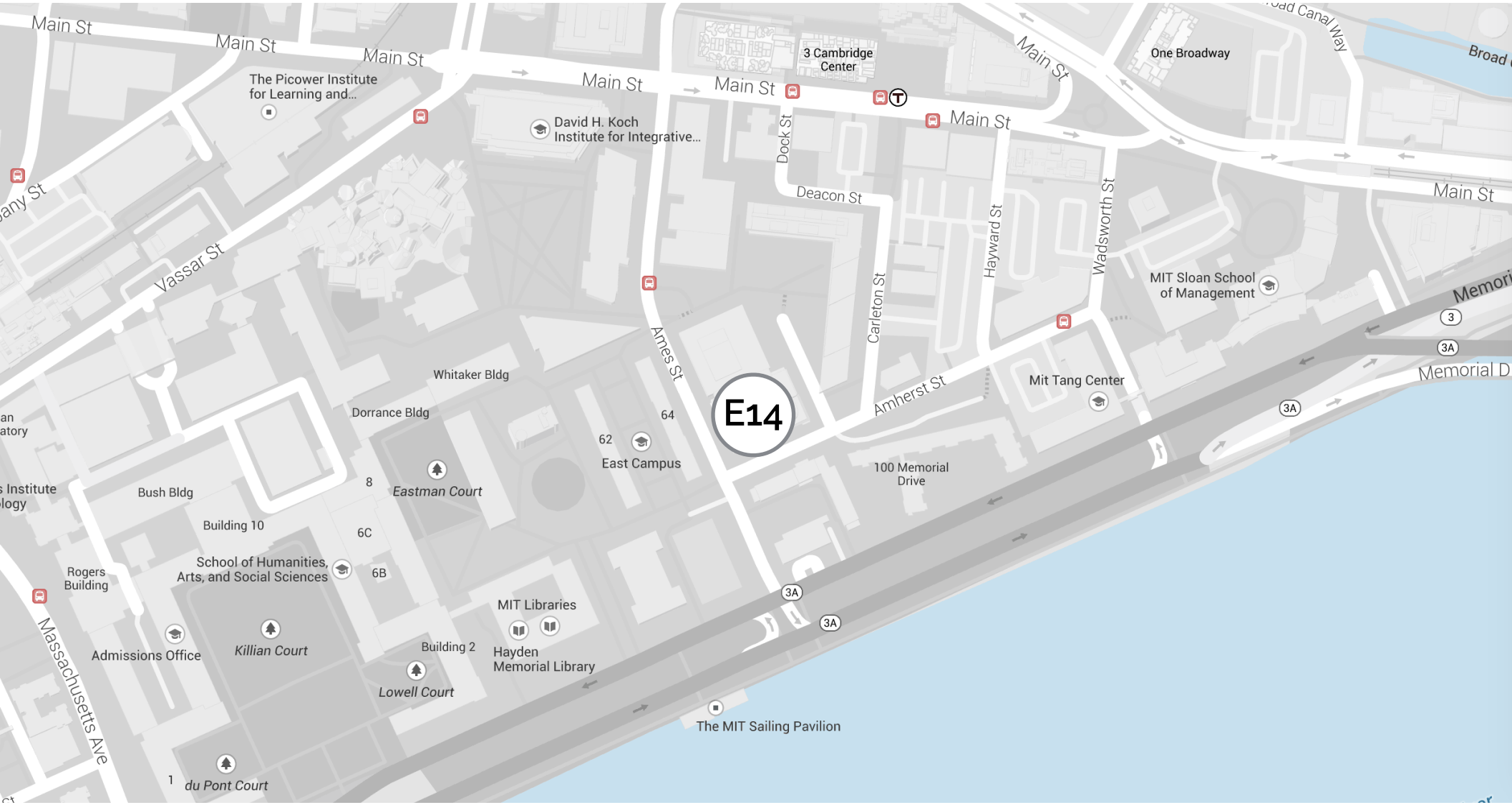
NetMob 2015

	April 7	April 8	April 9	April 10
8:30-9:00	Registration / Welcome	Registration / Welcome		D4D Session 2 [8 talks]
9:00-10:30	Hackathon Intro Data Overview	Keynote (Alex Vespignani) Session 1: Mobility [4 talks]	Session 5: Societies (II) [6 talks]	
10:30-11:00	Coffee break	Coffee break	Coffee break	Coffee break
11:00-12:30	Lecture 1: Intro to data-science tools	Session 2: Cities (I) [5 talks]	Session 6: Cities (II) [5 talks] Hackathon Winning Team Talk	D4D Session 3 [7 talks]
12:30-14:00		Lunch	Lunch	Lunch
14:00-15:30	Lecture 2: Mobility Lecture 3: Epidemics	Session 3: Economies [6 talks]	Session 7: Crowds [6 talks]	D4D Results D4D Awards Farewell
15:30-16:00		Coffee break	Coffee break	
16:00-17.30	Lecture 4: Social	Session 4: Societies (I) [6 talks] Hackathon Poster Session	D4D Session 1 [7 Talks]	
17:30-18:30		Poster Session 1	Poster Session 2	
18:30-20:30			Social Event	

6th floor MIT MediaLab building E14 75 Amherst St.
Cambridge, MA 02139

Venue

6th Floor
MIT MediaLab **building E14** 75 Amherst St.
Cambridge, MA 02139



Rooms

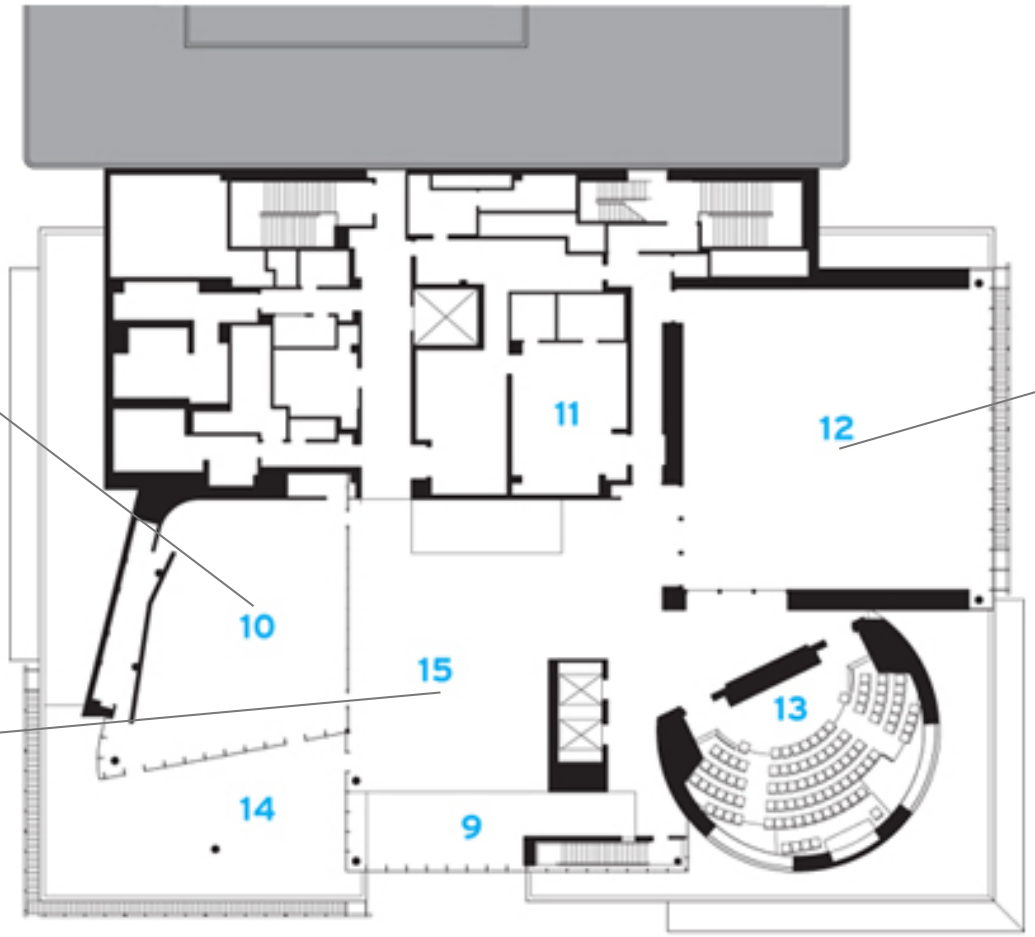
6th Floor
MIT MediaLab building E14 75 Amherst St.
Cambridge, MA 02139

Room 10 (Silverman room)

School lectures
Hacking
Final Session

Room 15 (Winter garden)

Poster Sessions
Coffee breaks
Lunch



Room 12 (Multipurpose room)

Netmob Sessions 1-6
D4D Sessions 1-4
Final Session

April 8 Room 12

NetMob 2015

Morning

8:30-9:00 *Registration/Welcome*

9:00-9:30 *Keynote*

Human mobility and the spreading of infectious diseases
Alessandro Vespignani

9:30-10:30 *Session 1 :: Mobility*

1. **Analyzing the Influence of Phone Context Data on the Performance of Human Mobility Predictors**
   Paul Baumann, Christian Koehler, Anind Dey and Silvia Santini
2. **Evaluating urban sensing applications using actively and passively-generated mobile phone location data**
   Fabio Pinelli, Giusy Di Lorenzo and Francesco Calabrese
3. **OpenStreetCab: Exploiting Taxi Mobility Patterns in New York City to Reduce Commuter Costs**
   Vsevolod Salnikov, Renaud Lambiotte, Anastasios Noulas and Cecilia Mascolo
4. **Assessing the impact of ride sharing on congestion using mobile phone data**
   Lauren Alexander, Jameson Toole and Marta Gonzalez

10:30-11:00 Coffee Break

11:00-12:15 *Session 2 :: Cities (I)*

1. **Energy Consumption Prediction using People Dynamics Derived from Cellular Network Data**
   Andrey Bogomolov, Bruno Lepri, Roberto Larcher, Fabrizio Antonelli, Fabio Pianesi and Alex Pentland
2. **Predicting Crime Hotspots Using Aggregated and Anonymized Data on People Dynamics**
   Andrey Bogomolov, Bruno Lepri, Jacopo Staiano, Emmanuel Letouze, Nuria Oliver, Fabio Pianesi and Alex Pentland.
3. **Estimating variability in health facility catchment population sizes using mobile phone call records**
   Elisabeth Zu Erbach-Schoenberg, Alessandro Sorichetta, Catherine Linard, Chris Lourenco, Victor Alegana, Tom Bird and Andrew Tatem
4. **Measuring de facto populations with Mobile Network Operator's Call Detail Record data**
   Erki Saluveer, Rein Ahas, Siiri Silm and Margus Tiru
5. **Investigating the relationships between spatial structures and urban characteristics**
   Marco De Nadai, Bruno Lepri, Roberto Larcher and Nicu Sebe.

12:15-14:00 Lunch

14:00-15:30 *Session 3 :: Economies*

1. **Behavior Revealed in Mobile Phone Usage Predicts Loan Repayment**
   Daniel Bjorkegren
2. **Estimating Food Consumption and Poverty Indices with Mobile Phone Data**
   Adeline Decuyper, Alex Rutherford, Amit Wadhwa, Jean Martin Bauer, Gautier Krings, Thoralf Gutierrez, Vincent D. Blondel and Miguel A. Luengo-Oroz.
3. **Mobility and Productivity: Quantifying Urban Economic Activity using Cell Phone Data**
   Gabriel Kreindler and Yuhei Miyauchi.
4. **Cignifi Risk Solutions, An application of mobile phone data for Brazil microcredit approval**
   Adriano Massuia and Qiuyan Xu.
5. **Socioeconomic correlations in communication networks.**
   Yannick Leo, Eric Fleury, Carlos Sarraute, J. Ignacio Alvarez-Hamelin and Márton Karsai.
6. **Understanding the Role of Social Networks on Labor Market Outcomes Using a Large Dataset from a Mobile Network**
   Filipa Reis and Pedro Ferreira

15:30-16:00 Coffee Break

16:00-17:30 *Session 4 :: Societies (I)*

1. **Persistent daily patterns in mobile telephone communication**
   Talayeh Aledavood, Eduardo López, Sam Roberts, Felix Reed-Tsochas, Esteban Moro, Robin Dunbar and Jari Saramäki
2. **Inferring social ties from WiFi scan results**
   Piotr Sapiezynski, David Kofoed Wind, Arkadiusz Stopczynski, Radu Gatej and Sune Lehmann.
3. **On the complementary roles of face-to-face and mediated social interactions**
   Guy Zyskind, Bruno Lepri, Alex 'Sandy' Pentland and Erez Shmueli.
4. **Understanding User Attributes from Calling Behavior: Exploring Call Detail Records through Field Observations and Potential of Estimating User Attributes of Anonymized Call Records**
   Ayumi Arai, Apichon Witayangkurn, Hiroshi Kanasugi, Teerayut Horanont, Xiaowei Shao and Shibasaki Ryosuke.
5. **The Evolution of Social Strategies across the Lifespan**
   Nitesh Chawla, Jie Tang and Yuxiao Dong.
6. **Temporal dynamics of intra and inter-city social networks**
   Alejandro Llorente, Manuel Cebrián, Esteban Moro.

17:30-18:30 *Poster Session 1*

Posters 1-40

9:00-10:30 *Session 5 :: Societies (II)*

1. **The Adoption of Network Goods: The Spread of Mobile Phones in Rwanda**
   Daniel Bjorkegren.
2. **The Strength of the Strongest Ties in Collaborative Problem Solving**
   Yves-Alexandre de Montjoye, Arkadiusz Stopczynski, Erez Shmueli, Alex Pentland and Sune Lehmann.
3. **Investigating Social Influence Through Large-Scale Field Experimentation**
   Johannes Bjelland, Geoffrey Canright, Asif Iqbal, Rich S. Ling, Kenth Engø-Monsen, Taimur Qureshi, Christoph Riedl, Pal Roe Sundsøy and David Lazer.
4. **Asymmetric Role of Social Influence in Smartphone Adoption in Large Mobile Networks.**
   Qiwei Han, Pedro Ferreira and Joao Costeira.
5. **Using Mobile Phone Data to Predict the Spatial Spread of Cholera.**
   Linus Bengtsson, Jean Gaudart, Xin Lu, Sandra Moore, Erik Wetter, Kankoe Sallah, Stanislas Rebaudete and Renaud Piarroux.
6. **Micro Dynamics of Social Interactions: Quantifying Human Life**
   Vedran Sekara, Arkadiusz Stopczynski and Sune Lehmann.

10:30-11:00 Coffee Break

11:00-12:15 *Session 6 :: Cities (II)*

1. **Neighborhood and Network Segregation: Ethnic Homophily in a 'Silently Separate' Society**
   Ott Toomet, Joshua Blumenstock, Rein Ahas and Erki Saluveer.
2. **Untangling the effects of residential segregation on individual mobility**
   Suma Desu, Lauren Alexander and Marta Gonzalez.
3. **Spatial and Social Homophily at a Massive Religious Gathering**
   Ian Barnett, Tarun Khanna and Jukka-Pekka Onnela.
4. **Predicting gender from mobile phone metadata**
   Eaman Jahani, Pål Roe Sundsøy, Johannes Bjelland, Asif Iqbal, Alex Pentland and Yves-Alexandre de Montjoye
5. **Presentation by the Hackathon winning team**

12:15-14:00 Lunch

14:00-15:30 *Session 7 :: Crowds*

1. **Spatiotemporal Detection of Unusual Human Population Behavior Using Mobile Phone Data.**
   Adrian Dobra, Nathalie Williams and Nathan Eagle.
2. **Estimating Attendance From Cellular Network Data**
   Marco Mamei and Massimo Colonna.
3. **Seasonal Decomposition of Cell Phone Activity Series and Urban Dynamics.**
   Blerim Cici, Athina Markopoulou, Minas Gjoka and Carter Butts.
4. **Social Events in a Time-Varying Mobile Phone Graph.**
   Carlos Sarraute, Jorge Brea, Javier Burroni, Klaus Wehmuth, Artur Ziviani and J. Ignacio Alvarez-Hamelin.
5. **Real-Time Social Event Analytics**
   Francesco Calabrese, Giusy Di Lorenzo, Gavin McArdle, Fabio Pinelli and Erik Van Lierde.
6. **Inferring spatio-temporal changes in urban areas from mobile phone data**
   Sofia Nikitaki and Maurizio Dusi

15:30-16:00 Coffee Break

16:00-17:45 *D4D Session 1*

1. **Intro**
   Nicolas de Cordes
2. **[N02] Spatial structure and efficiency of commuting in Senegalese cities**
   Thomas Louail
3. **[N03] Construction of socio-demographic indicators with digital breadcrumbs**
   Timo Schmid
4. **[N07] Virtual Networks and Poverty Analysis in Senegal**
   Neeti Pokhriyal, Wen Dong, Venu Govindaraju
5. **[O02] Anonymizability of mobile traffic datasets**
   Marco Gramaglia
6. **[O05] Data for Development Reloaded: Visual Matrix Techniques for the Exploration and Analysisof Massive Mobile Phone Data**
   Stef Van den Elzen
7. **[E01] Using mobile phone data for energy infrastructure planning**
   Markus Schläpfer

17:45-18:30 *Poster Session 2*

Posters 40-80

18.30-20:30 *Social Event*

April 10 Room 12

NetMob 2015

Morning

8:30-10:30 *D4D Session 2*

1. **[T02] Deviations from the norm: Detecting regularities and anomalies in human mobility patterns**
   Gijs Joost Brouwer
2. **[T03] National and regional road network**
   Erik de Romph
3. **[T04] Building workers' travel demand models based on mobile phone data**
   Liu Feng
4. **[T05] Impact of transport infrastructure on urban mobility: evidence from Dakar**
   Amadou Sy
5. **[T06] Travel demand analysis with differentially private releases**
   David Gundlegard
6. **[T10] The municipality and the territory: two scales of understanding the city**
   Jerome Chenal
7. **[T15] Using mobile phone data for spatial planning simulation and optimization technologies (SPOT)**
   Serigne Gueye
8. **[T16] Where do we develop? Discovering regions for urban investment in Senegal**
   Derek Doran

10:30-11:00 Coffee Break

11:00-12:30 *D4D Session 3*

1. **[A01] Mobility profiles and calendars for food security and livelihoods analysis**
   Pedro Zufiria
2. **[A02] Genesis of millet prices in Senegal**
   Damien Jacques
3. **[H01] Quantifying Effect of Movement Due to Holidays on Malaria Prevalence**
   Sveta Milusheva
4. **[H02] Uncovering the impact of human mobility on schistosomiasis via mobile phone data**
   Marino Gatto
5. **[H11] Mobile Data as Public-Health Decision Enabler: A Case Study of Cardiac and Neurological Emergencies**
   Edward Mutafungwa
6. **[H12] Modeling ebola diffusion in Senegal using agent-based simulation**
   Jonathan Leidig

12:30-14:00 Lunch

NetMob 2015

Afternoon

14:00-15:30 *Final Session*

1. **D4D Governance and Ethics Learning**
   William Hoffman (World Economic Forum)
   Nicolas de Cordes (VP Orange D4D Committee Coordinator)
2. **D4D Awards Ceremony**
   Vincent Blondel (chairman D4D commitee)
   Nicolas de Cordes (VP Orange D4D Committee Coordinator)
3. **D4D The Future: "Data Revolution" and Data for Climate announcement**
   Robert Kirkpatrick (Director of Global Pulse, United Nations)
4. **Netmob Farewell**
   Esteban Moro (co-chair Netmob)
   Vincent Blondel (co-chair Netmob)

School // Hackathon Schedule

NetMob 2015

	April 7	April 8	April 9
Morning			
8:30-9:00	Registration/Welcome	Breakfast	
9:30-10:30	*Intro* **[Room 10]** 1. **Hackathon Intro** Yves-Alexandre de Montjoye (MIT) 2. **Overview of the data.** Zbigniew Smoreda, Orange	*Hacking* **[Room 10]**	
10:30-11:00	Coffee Break	Coffee Break	
11:00-12:30	*Lecture 1* **[Room 10]** 1. **Intro to data-science tools** Luc Rocher, ENS-Lyon, France	*Hacking* **[Room 10]**	*Hackathon results* **[Room 12]** **Winning team presentation at 12:15 in Session 6**
Afternoon			
12:30-14:00	Lunch	Lunch	
14:00-15:30	*Lecture 2 & 3* **[Room 10]** 2. **Mobility modeling** Jameson Toole, MIT 3. **Epidemic spreading** Nicola Perra, NEU	*Hacking* **[Room 10]**	
15:30-16:00	Coffee Break	Coffee Break	
16:00-16:45	*Lecture 4* **[Room 10]** 4. **Social networks** Giovanna Miritello, ZED, Spain	*Hacking* **[Room 10]**	
16:45-17:30	*Hacking* **[Room 10]**	*Poster + Evaluation* **[Room 15]** **Poster presentations** **Evaluation by the jury**	
17:30-...	*Hacking* **[Room 10]**		

Poster Session 1 17:30-18:30 April 8 [room 15]

NetMob 2015

Posters can be displayed from 12:30 April 8 to 12:00 April 9

1. **Violence and cell phone communication patterns: evidence from C'ote d'Ivoire**
   Sera Linardi, Daniel Berger and Shankar Kalyanaraman
2. **An optimization model for determining the influential nodes for diffusion of information thorough the Short Message System on a social network**
   Mehrdad Agha Mohammad Ali Kermani, Alireza Aliahmadi and Robert Hanneman
3. **Extrapolation in a Big Data Environment: Detect Home Locations in a Continuous Stream of Location Data**
   Hendrik Wagenseil and Markus Ziegler
4. **Replicability and value of techniques in mobile usage analytics across M4D organisations**
   Adam Wills
5. **Classic meets Machine Learning**
   Vlad Ardelean and Nina Meinel
6. **Social Networks, Ethnicity, & Political Accountability**
   Nicholas Eubank
7. **Discovering dependence of tweet inter-arrival times**
   Balázs Gerencsér, Christophe Cloquet and Vincent Blondel
8. **A Unified Model for Individual Spatial Temporal Mobility Patterns**
   Yingxiang Yang Yang and Marta Gonzalez.
9. **Estimating the Wealth of an Individual Based on Individual Patterns of Phone Use**
   Joshua Blumenstock
10. **Predicting commuting trips based on mobile phone data**
    Carlos Andre Reis Pinheiro, Alexandre Evsukoff, Bart Baesens, Nelson Ebecken and Moacyr Silva
11. **Real-time Event Detection Method using Location Information from Mobile Phone Handsets**
    Satoshi Nishiyama, Kento Kimura, Jun Nakajima and Shinji Kashima
12. **Measuring global and regional influence of cites using geolocated tweets**
    Jose J. Ramasco
13. **Empirical Evaluation of Disaggregated Trip Data Collected from Cellular Networks**
    Peter Widhalm and Michael Ulm
14. **I don't have a photograph, but you can have my footprints**
    Christopher Riederer, Sebastian Zimmeck, Coralie Phanord, Augustin Chaintreau and Steven Bellovin
15. **Longitudinal Human Mobility and Real-time Access to a National Density Surface of Retail Outlets**
    Thomas Kirchner, Hong Gao, Andrew Anesetti-Rothermel, Heather Carlos and Brian House
16. **Bandicoot: a Python toolbox to extract behavioral indicators from mobile phone metadata**
    Yves-Alexandre de Montjoye, Luc Rocher and Alex 'sandy' Pentland
17. **Detecting Train Commuters using CDRs and GIS information**
    Hiroki Ishizuka, Nao Kobayashi, Shigeki Muramatsu and Chihiro Ono.
18. **Agent-Based Dynamic Pricing for Wireless Services**
    Dina Elreedy, Amir Atiya and Hatem Fayed
19. **Measuring the predictability of interstate travel times using real time traffic monitoring data for Boston**
    Morgan Frank, Serdar Colak, Jameson Toole and Marta Gonzalez
20. **Analysis and Modeling of Mobile Data Traffic in Mexico City**
    Eduardo Mucelli Rezende Oliveira, Aline Carneiro Viana, Naveen Kolar Purushothama and Carlos Sarraute

Poster Session 1 17:30-18:30 April 8 [room 15]

NetMob 2015

Posters can be displayed from 12:30 April 8 to 12:00 April 9

21. **Inference of Users Demographic Attributes based on Homophily in Communication Networks**
    Jorge Brea, Javier Burroni and Carlos Sarraute.
22. **The City Pulse of Buenos Aires**
    Carlos Sarraute, Carolina Lang, Nicolas Ponieman and Sebastian Anapolsky.
23. **Detecting and understanding big events in big cities**
    Barbara Furletti, Lorenzo Gabrielli, Roberto Trasarti, Zbigniew Smoreda, Maarten Vanhoof and Cezary Ziemlicki.
24. **Vehicle-Relative Positioning System**
    Márton Hunyady, Gergely Lukács and András Oláh.
25. **Change Detection in Human Mobility Patterns from Successive OD Matrices**
    Julio Chaves, Moacyr Silva and Alexandre Evsukoff.
26. **Inferring social status and rich club effects in enterprise communication networks**
    Yuxiao Dong, Jie Tang and Nitesh Chawla.
27. **Home and Work Estimation from Mobile Phone Data: Improving Accuracy and Privacy through Spatial Aggregation**
    Bradley Sturt, Jameson Toole, Serdar Colak and Marta Gonzalez.
28. **Studying Human Behavior through the Lens of Mobile Phones during Floods**
    Alfredo J. Morales, David Pastor-Escuredo, Yolanda Torres, Vanessa Frias-Martinez, Enrique Frias-Martinez, Nuria Oliver, Alex Rutherford, Tomaz Logar, Rene Clausen Nielsen, Olivia De Backer and Miguel Angel Luengo-Oroz.
29. **Earthquakes, Hurricanes and Mobile Communication Patterns in the New York Metro Area: Collective Behavior during Extreme Events**
    Christopher Small, Richard Becker, Ramón Cáceres and Simon Urbanek.
30. **Work in Progress: Application of Floating Phone Data (FPD) in Germany**
    Moritz von Mörer.
31. **Evolving classification based on CDR-derived behavior patterns**
    Michal Mucha, Dominik Filipiak and Agata Filipowska.
32. **Routing messages through mobile phone network in dense cities**
    Floran Berthaud, Yannick Léo, Carlos Sarraute, Anthony Busson and Eric Fleury.
33. **Topological Properties and Temporal Dynamics of Place Networks in Urban Environments**
    Anastasios Noulas, Blake Shaw, Renaud Lambiotte and Cecilia Mascolo.
34. **The Effect of Geographical Proximity on Mobile Communication**
    Hyungtae Kim and Tony Jebara.
35. **How mobile positioning data can contribute to urban geography: measuring ethnic segregation in daily activity spaces in Estonia**
    Rein Ahas, Siiri Silm and Erki Saluveer.
36. **Protecting the Privacy of Location Data using the openPDS/SafeAnswers Framework**
    Fatima Makki, Wassim El-Hajj, Abbas El-Hakim and Yves-Alexandre de Montjoye.
37. **Characterizing preferences and returns in human mobility**
    Hugo Barbosa Filho, Fernando B. De Lima Neto, Alexandre Evsukoff and Ronaldo Menezes.
38. **Utilizing Origin Destination Information obtained from Mobile Phones in Equilibriated Path Choice**
    Serdar Colak and Marta Gonzalez.
39. **Land use classification using call detail records**
    Kaushalya Madhawa, Sriganesh Lokanathan, Danaja Maldeniya and Rohan Samarajiva.
40. **Impact of Indoor-Outdoor Context on Crowdsourcing based Mobile Coverage Analysis**
    Mahesh Marina, Valentin Radu and Konstantinos Balampekos.

Poster Session 2 17:45-18:30 April 9 [room 15]

NetMob 2015

Posters can be displayed from 12:30 April 9 to 12:00 April 10

1. **Anomaly detection in mobile phone data — Exploratory analysis using Self-Organizing Maps**
   Veena Mendiratta, Vijay Gurbani and Chitra Phadke
2. **Mobile Phone Data as a Means of Studying Activity Space Segregation at Scale**
   Robert Manduca, Bradley Sturt and Marta Gonzalez
3. **Gender-based Characterization of Communication Behavior**
   Riyadh Alnasser, Faisal Aleissa, Fahad Alhasoun, Abdullah Almaatouq, Anas Alfaris and Marta Gonzalez
4. **Dynamics of social and spatial segregation using mobile phone metadata**
   Johannes Bjelland, Bjørn-Atle Reme and Pål Sundsøy.
5. **Behavioral Modeling for Churn Prediction: Early Indicators and Accurate Predictors of Custom Defection and Loyalty**
   Muhammad Raza Khan, Joshua Manoj, Anikate Singh and Joshua Blumenstock
6. **Places and Mobility: the Influence of Attractions on People Movement**
   Fahad Alhasoun, May Alhazzani, Faisal Aleissa, Riyadh Alnasser and Marta Gonzalez
7. **Classification of Human Population in Hospitals Using Mobile Phone Data**
   Guanning Dong, Xianfeng Song and Xinhai Liu
8. **Campaign Optimization through Mobility Network Analysis**
   Yaniv Altshuler, Erez Shmueli, Guy Zyskind, Oren Lederman, Nuria Oliver and Alex Pentland.
9. **[A03] Visual Analysis on Call Data Records for Improving Disaster Resilience**
   Brian Tomaszweski
10. **[A04] Unraveling correlations between agricultural events and phone traffic**
    Rosa Benito
11. **[H03] Impact and scale of mobility on the spatial epidemiology of tuberculosis**
    Bruno Lepri
12. **[H04] Individual-based modeling of contact networks of epidemic diffusion using real-life data**
    Rich Ling
13. **[H07] Human mobility and the spreading of waterborne diseases**
    Enrico Bertuzzo
14. **[H08] Progmosis: Evaluating Risky Individual Behavior During Epidemics**
    Antonio Lima
15. **[H09] Developing an agent based migration model for Senegal for malaria transmission**
    Adrian Tompkins
16. **[H10] Forecasting Influenza in Senegal with Call Detail Records**
    Hao Wu
17. **[N01] Towards Connecting People, Locations and Real-World Events in a Cellular Network**
    Ramona Trestian
18. **[N04] Mapping and Measuring of social disparités in Senegal using mobile phone subscribers data**
    M Saravanan
19. **[N05] Detection of Population Mobility Anomalies in Senegal from Base Station Profiles**
    Foued Melakessou
20. **[N09] Could and should bigdata complement official statistics? Perspectives from cell phone data, population density and climate vulnerability in Senegal**
    Emmanuel Letouze
21. **[O01] Generating anonymous sequence preserving datasets**
    Sigal Shaked

Poster Session 2 17:45-18:30 April 9 [room 15]

NetMob 2015

Posters can be displayed from 12:30 April 9 to 12:00 April 10

22. **[O04] Human Mobility during Religious Festivals in Senegal**
    Christelle Scharff
23. **[O06] Adaptive Power Load Balancing in Cellular Networks**
    Petko Bogdanov
24. **[O07] Senegal Time-Space 2013**
    Christopher Small
25. **[O08a] High resolution mobility estimation from telecommunications data**
    David Meyer
26. **[O08b] Persistent Homology for Mobile Phone Data Analysis**
    David Meyer
27. **[O08c] Analyzing Internal Migration Patterns using Aggregated Cell Phone Data**
    David Meyer
28. **[O08d] Glimpses of Senegal's social network**
    David Meyer
29. **[T01] Roads+**
    Jari Saramäki
30. **[T07] Cars and Calls: Using CDR Data to Approximate Official Traffic Counts**
    Vanessa Frias-Martinez
31. **[T08] Towards Mobile Social Crowd-Sensing for Transport information management**
    Georgios Bouloukakis
32. **[T09] Operational Planning of Transport and Infrastructure using Mobile-data Analysis (OPTIMA)**
    Ankit Singla
33. **[T11] Sanitization of CDRs via differentially-private sketches**
    Mohammed Tuhin
34. **[T12] A Cell Dwell Time Model for Synthetic Population Generation from Call Detail Records**
    Foued Melakessou
35. **[T13] Improving Mobility Prediction Accuracy based on Clustering on D4D Dataset**
    Jaeseong Jeong, Mathieu Leconte, Alexandre Proutiere
36. **[T14] From digital footprints to the dynamic population distribution and road network efficiency**
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37. **[T17] Understanding Traffic Matrix for Transportation Planning with Interregional Connectivity**
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38. **[T18] High Resolution Traffic Maps Generation Using Cellular Big Data**
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41. **[T21] Text me – if you can : literacy, networks and mobility in Dakar**
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42. **[T22] Cellphone's Users Trajectories Clustering from Call Detail Records**
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