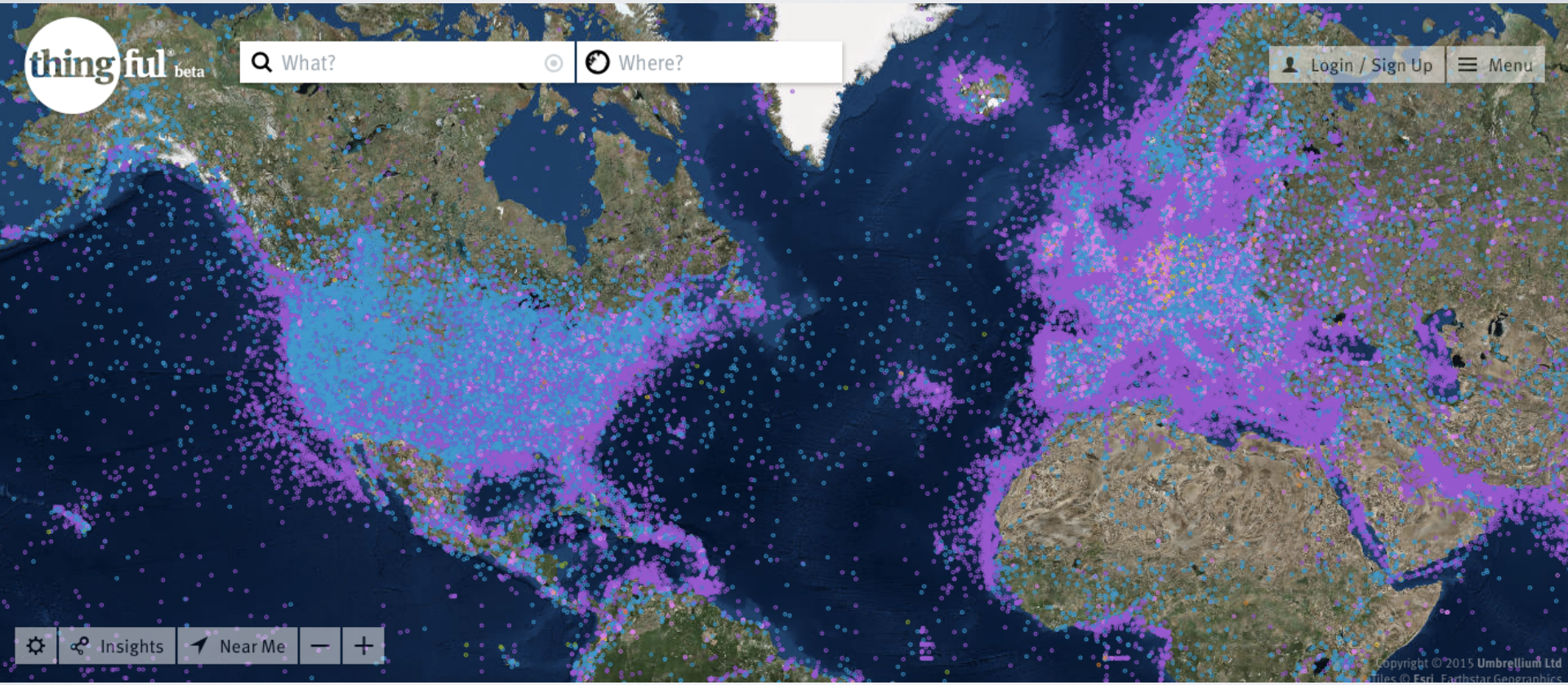
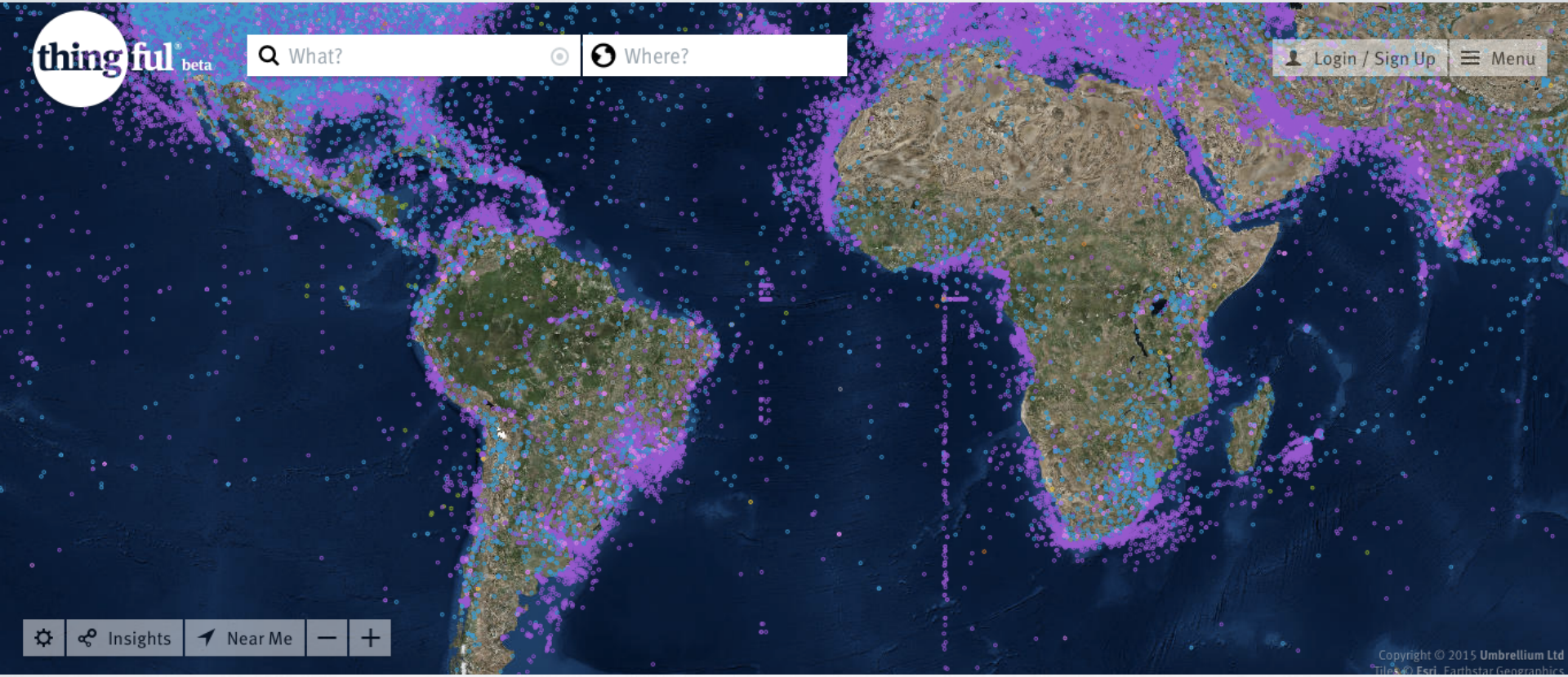
WELCOME TO THE ICTP!

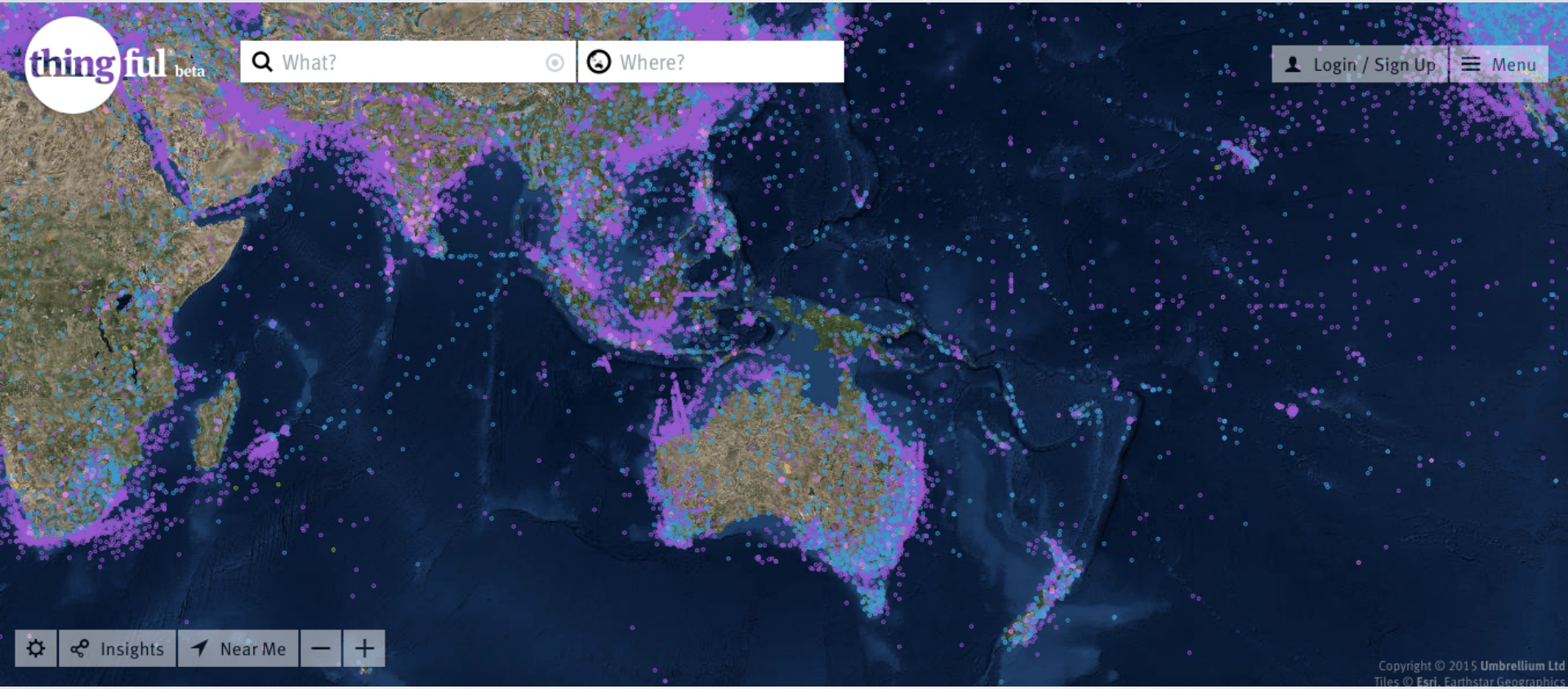
WHY THIS WORKSHOP?



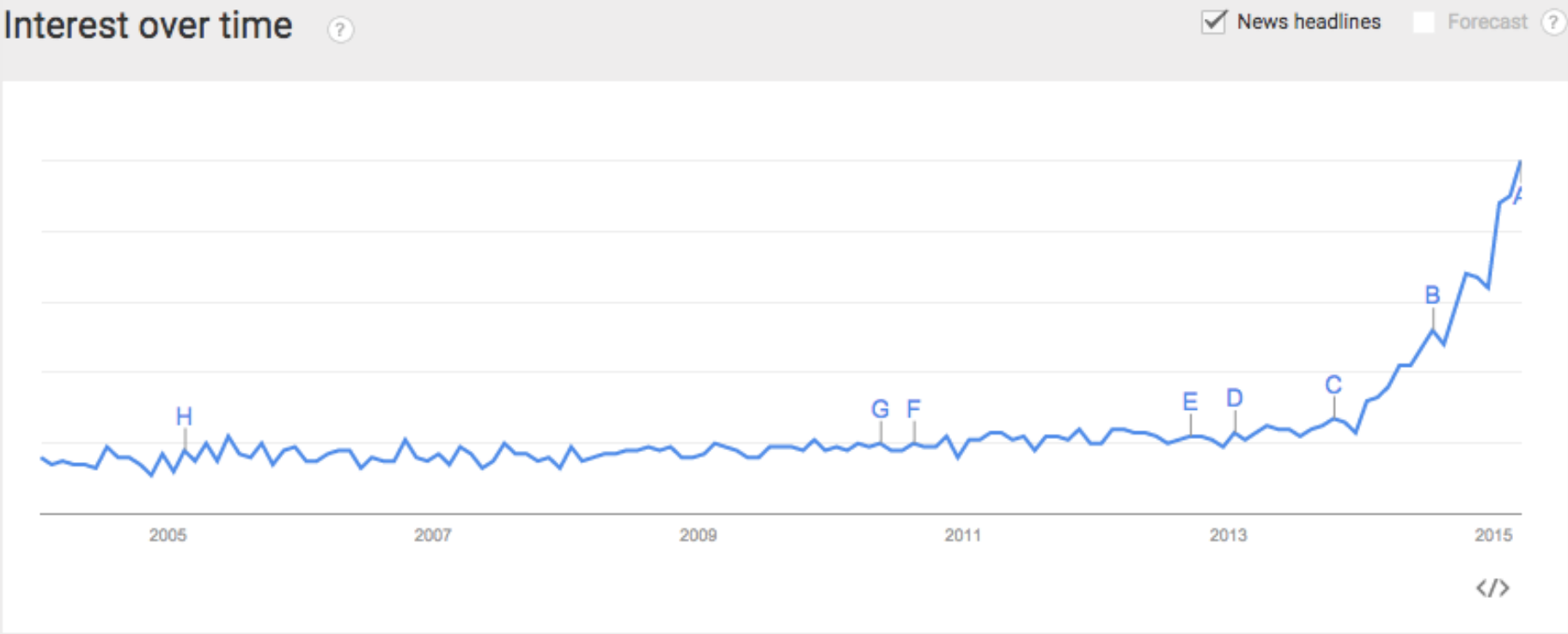
WHY THIS WORKSHOP?



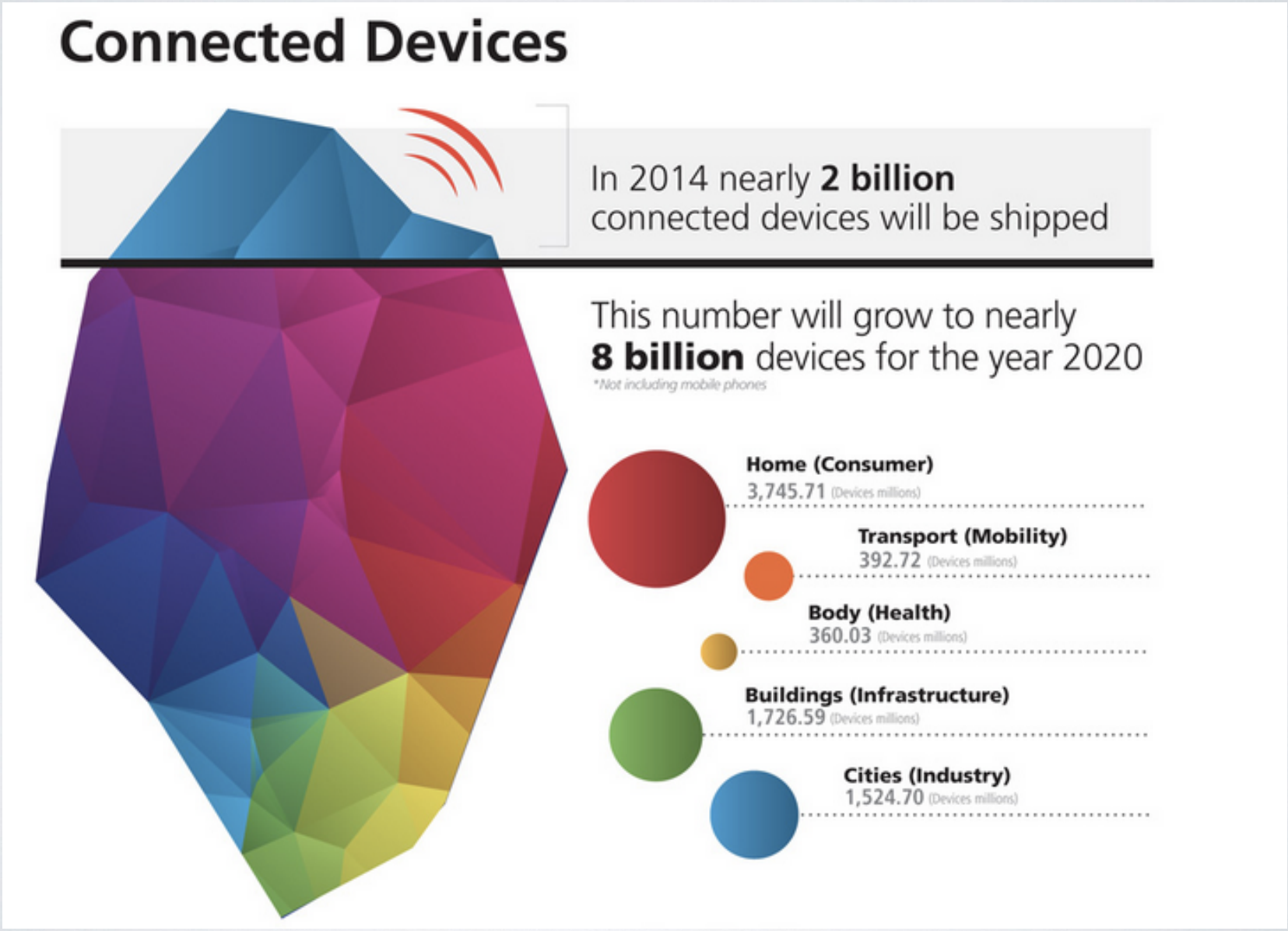
WHY THIS WORKSHOP?



WHY THIS WORKSHOP?



WHY THIS WORKSHOP?



WHY THIS WORKSHOP?

- **Wikipedia**: The Internet of Things (IoT) refers to uniquely identifiable objects and their virtual representations in an Internet-like structure.

  [http://en.wikipedia.org/wiki/Internet_of_things - 21-Jun-2014]

- **Cisco**: The Internet of Things (IoT) is the network of physical objects accessed through the Internet, as defined by technology analysts and visionaries. These objects contain embedded technology to interact with internal states or the external environment. In other words, when objects can sense and communicate, it changes how and where decisions are made, and who makes them.

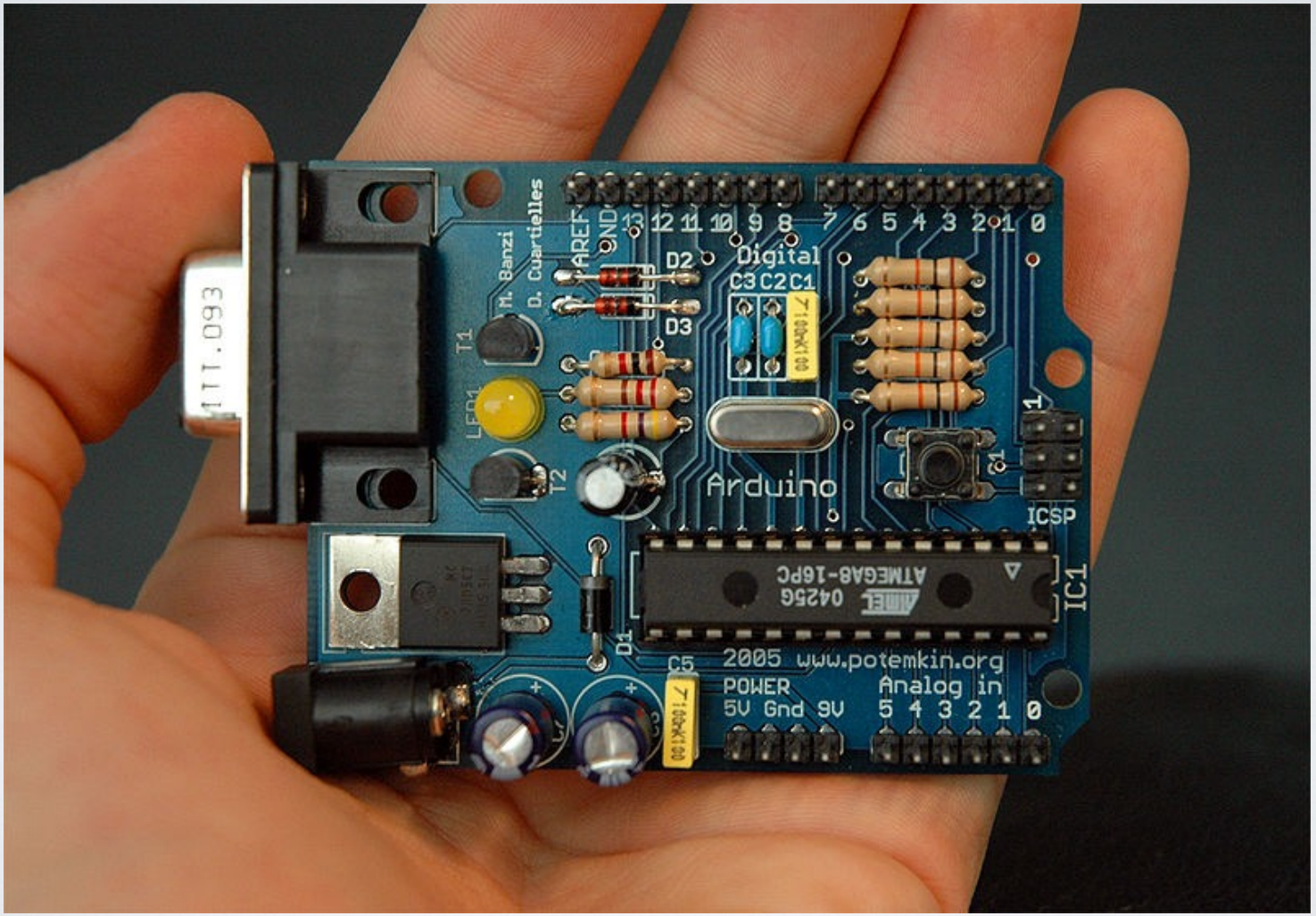
  [http://www.cisco.com/web/solutions/trends/iot/overview.html - 21-Jun-2014]

IOT


1447
No Service
12:46 PM
fitbit
Edit
Today
Force
1,447 steps
0.64 miles
1,047 calories burned
3 floors
0 active minutes
engadget

IOT

IOT


M. Banzi
D. Cuartielles
AREF
GND
Digital
D2
D3
T1
T2
LED1
Arduino
ICSP
IC1
D1
C5
2005 www.potemkin.org
POWER
5V Gnd 9V
Analog in
5 4 3 2 1 0
ATMEGA8-16PC
0425G

IOT


nest
75
IN 25 MIN
72
4G
9:41 AM
nest
FORT WORTH, TX
88°
HOME
72
LIVING ROOM

IOT

Internet +

Things +

Data

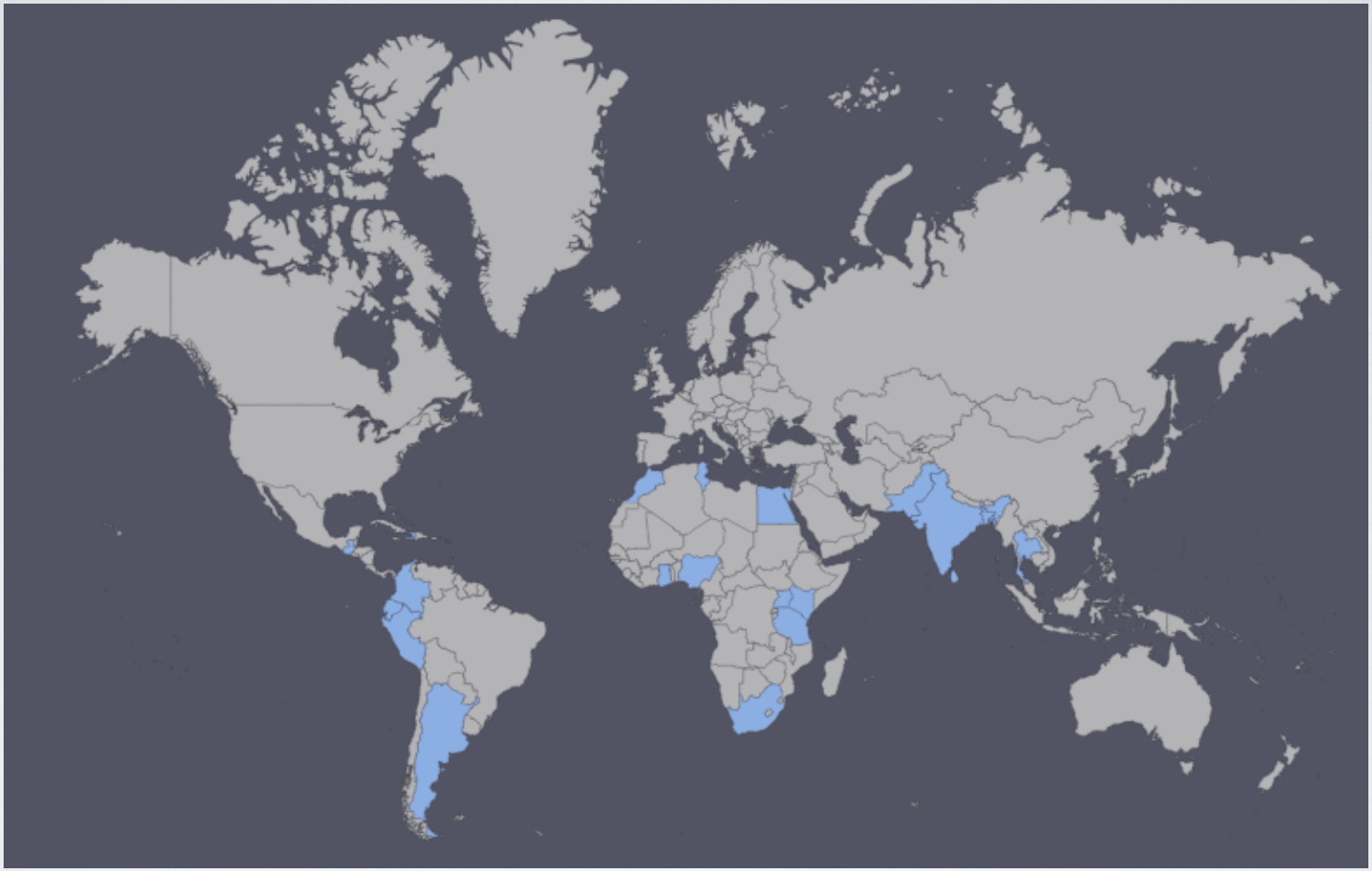
IOT

Internet	IPv6
Things	Contiki
Data	Big Data

APPLICANTS

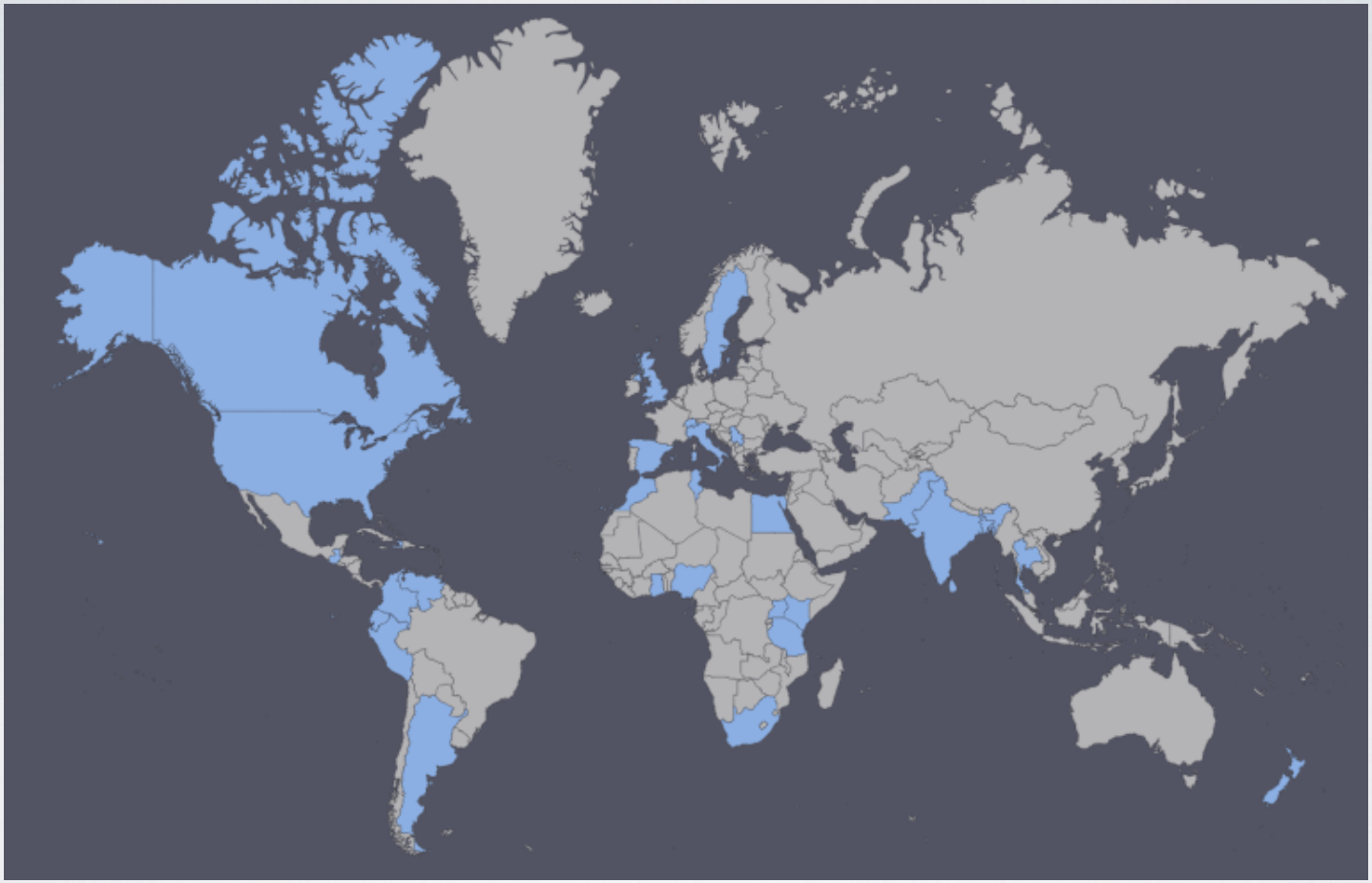
Requests for Participation: 306

WHERE DO WE COME FROM?



30 participants from 20 different countries (from Argentina to Uganda)

WHERE DO WE COME FROM?



40 participants from 30 different countries (with lecturers/speakers)

SCHEDULE

Monday
Tuesday
Wednesday
Thursday
Friday

IoT
IPv6
Contiki

Monday
Tuesday

Big Data

Wednesday
Thursday
Friday

Standards
Projects
Case Studies

VENUE

Monday
Tuesday
Wednesday
Thursday
Friday

} Galileo Guesthouse

Monday
Tuesday

} Galileo Guesthouse

Wednesday
Thursday
Friday

} Adriatico Guesthouse

THANKS

- Directors
  - S. Huter (NSRC, USA)
  - Maurizio Molinaro (ISMB, Italy)
  - Steve Chan (Swansea University, UK)

THANKS

- Financial support
  - ITU (International Telecommunications Union), CH
  - NSRC (Network Startup Resource Center), USA
  - NetworkTheWorld, UK

PHILOSOPHY

Tell me and I forget,
teach me and I may remember,
involve me and I learn.

— Benjamin Franklin

RULES

1) ~~Try to~~ be on time

2) Attend at least 90% of the lectures + labs

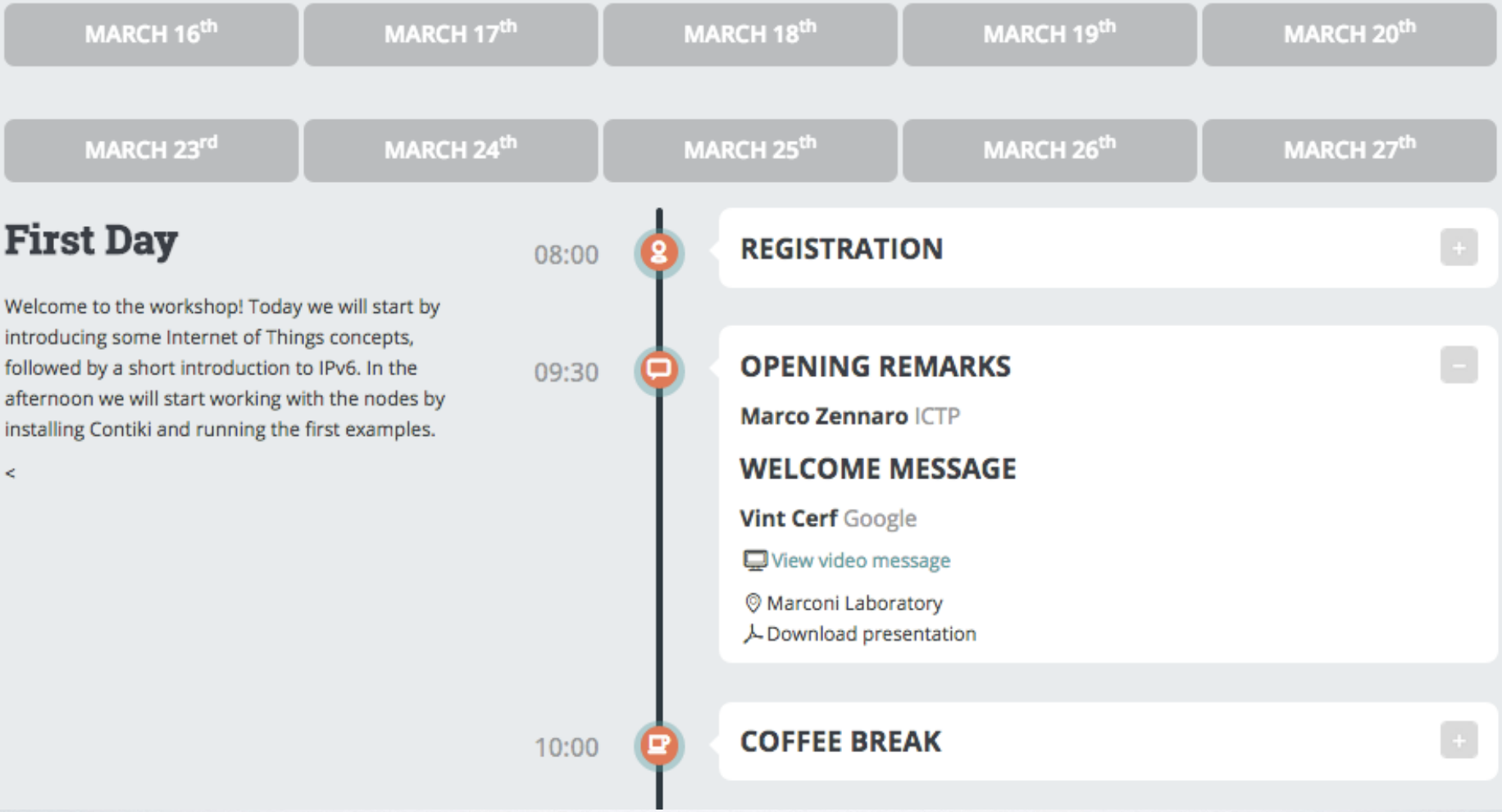
3) **Bring your laptop**

4) Follow the slides at **http://preso.tv/iot**

LAB

- Wireless Network
  - SSID: MarconiLab
  - Password: marconi-lab
- Workshop's Website
  - http://wireless.ictp.it/school_2015

WEBSITE


MARCH 16th
MARCH 17th
MARCH 18th
MARCH 19th
MARCH 20th
MARCH 23rd
MARCH 24th
MARCH 25th
MARCH 26th
MARCH 27th
First Day
Welcome to the workshop! Today we will start by introducing some Internet of Things concepts, followed by a short introduction to IPv6. In the afternoon we will start working with the nodes by installing Contiki and running the first examples.
<
08:00
REGISTRATION
09:30
OPENING REMARKS
Marco Zennaro ICTP
WELCOME MESSAGE
Vint Cerf Google
View video message
Marconi Laboratory
Download presentation
10:00
COFFEE BREAK

VINT CERF

Cerf, Vinton G. and Robert E. Kahn, **A Protocol for Packet Network Intercommunication**, IEEE Transactions on Communications (COM-22), May, **1974**, pp. 637-648.

A protocol that supports the sharing of resources that exist in different packet switching networks is presented. The protocol provides for variation in individual network packet sizes, transmission failures, sequencing, flow control, end-to-end error checking, and the creation and destruction of logical process-to-process connections. Some implementation issues are considered, and problems such as internetwork routing, accounting, and timeouts are exposed.

VINT CERF

"Father of the Internet," Cerf is the co-designer of the TCP/IP protocols and the architecture of the Internet.

In December 1997, President Bill Clinton presented the U.S. National Medal of Technology to Cerf and his colleague, Robert E. Kahn, for founding and developing the Internet.

In 2004, Cerf was the recipient of the ACM Alan M. Turing award (sometimes called the "Nobel Prize of Computer Science").

In 2005 he joined Google as Chief Internet Evangelist.

He was elected as the president of the Association for Computing Machinery in May 2012.

In 2014, Cerf was awarded Officer of the French Légion d'honneur.

LECTURERS OF THE WEEK

Mirko
Franceschinis
ISMB
Italy

Antonio
Linan
Zoleria
Spain

Alvaro
Vives
NSRC
Spain

Jon
Brewer
NSRC
New
Zealand

LECTURERS OF THE WEEK

Sebastian
Buettrich
NSRC
Denmark

Steve
Okay
Inveneo
USA

Antoine
Bagula
UWC
South
Africa

Ermanno
Pietrosemoli
ICTP
Italy

WHAT ABOUT YOU?