

# Internet Measurement

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<http://www.net.t-labs.tu-berlin.de/>

# General information (1)

## □ Area:

- Diplom (Informatik): BKS – Hauptstudium Vertiefer
- Master (Informatik): Kommunikationsbasierte Systeme
- Bachelor (Informatik): Kommunikationstechnik
- Master (techn. Informatik): Techn. Anwendungen

## □ Time

- Tuesday: 10:00 – 12:00

## □ Room

- TEL 1118/19

## □ Language

- English (questions can be asked in German!)

# General information (2)

## □ Web site

- <http://www.inet.tu-berlin.de/menue/teaching0/ss20130/im13/>

## □ ISIS

- <https://www.isis.tu-berlin.de/course/view.php?id=8394>

## □ Prerequisite:

- Grundstudium
- NPA, TKN or equivalent knowledge of the Internet

# General information (3)

- ❑ Lecture with integrated exercises
  - Lectures
  - In class practical exercises
    - Good participation will lead to bonus on grade
    - Passing of the exam necessary to get bonus
  - 2 SWS / 3 LP
- ❑ Exam
  - For those that need it 😊
  - Oral exam after semester end

# General information (4)

- ❑ Co-Lecturer: Dr. Nikolaos Chatzis
- ❑ Past:
  - National Technical University of Athens
    - Diploma in Electrical & Computer Engineering
  - Fraunhofer Institute FOKUS & TU Berlin
    - Ph.D. in Computer Science (Networking)
- ❑ Now:
  - T-Labs & TU Berlin (FG INET)
    - Postdoc in Networking
- ❑ Research areas:
  - Traffic monitoring and analysis, passive and active measurements of Internet infrastructure components

# General information (5)

- ❑ Co-Lecturer: Georgios Smaragdakis, Ph.D.
- ❑ Past:
  - Technical University of Crete
    - Diploma in Electrical & Computer Engineering
  - Boston University, Boston, USA
    - Ph.D. in Computer Science (Networking)
- ❑ Now:
  - T-Labs & TU Berlin (FG INET)
    - Senior Researcher in Networking
- ❑ Research areas:
  - Content Distribution, Internet Measurements

# What is this course?

- ❑ Not an introduction to the Internet
- ❑ Focus: Measuring the Internet
  - Methodology
    - Why to measure
    - How to measure
    - How to interpret measurement results
    - How to do performance evaluation
  - How does the Internet actually look like
    - Application characteristics
    - Traffic characteristics
    - Topology / route choice

# Reading

- ❑ Mark Crovella, Balachander Krishnamurthy.  
*Internet Measurement: Infrastructure, Traffic and Applications.*  
Wiley, 2006.
- ❑ Raj Jain  
*The Art of Computer Systems Performance Analysis.*  
Wiley & Sons, New York, 1991
- ❑ Kurose and Ross:  
*Computer Networking: A Top-Down Approach Featuring the Internet.*  
Fifth edition, Addison-Wesley, 2009  
Preliminary first edition online: student (quarter24)
- ❑ ... see Web