



Institut
Mines-Télécom



M2-ACN 2018-2019

Welcome Day



An Elite Program



- **Quality, not quantity:**
 - You're here after a rigorous selection process
 - Motivation
 - Pre-requisite courses
 - Academic excellence
- **Mutual Commitments:**
 - **We Guarantee Conditions for success:**
 - Low student-to-faculty ratio
 - Close interaction with teachers/ researchers - **use them !!!**
 - We will **drive you hard** - you **will deliver**



A research oriented program



- Because you may be interested by research (academic or industrial or both)...
 - Or not,... But would like to know more
- Proven, Efficient way for you to LEARN
- Because technology evolves extremely fast
 - Getting familiar with *potential* future technologies
 - Not simply understand the « how » but also the « why »

Partnership



- **Academic partners:**
 - **INRIA/ENS Paris (Protocol Safety & Verification)**
 - **Université Paris Sud**
- **Industrial Partners**
 - **Cisco PIRL**
 - **Cisco/X Education & Research Chair**
 - **NewNet@Paris Education & Research Chair**
 - **Participation to Core IP Networks & Future Internet courses.**
 - **Nokia Bell Labs**
 - **Responsible of 2 course: Propagation in Graphs, Physical Limits of Communications**
 - **Projects, PhD grants & common research projects**
 - **Thales, ...**



Overall Content



- **Technical and Scientific Courses**
 - **Advanced technical and scientific skills**
 - **architectures, protocols, know-how (50%)**
 - **mathematic tools, theory (50%)**

- **Introduction to Research**



- **Scientific Project.**
 - Immersion in a research lab, work with researchers
 - (Reading Group). Help on methods, writing, presentations
- **Internship (6 Months full time in a lab)**

Scientific Project

- **Scientific Project: « apprenticeship » in innovation:**
 - **Pair you up with a working scientist**
 - **In a (sub-)field that interests you**
 - **Can be academic, industrial, or (ideally) both**
 - **But, must unconditionally entail “creation of new knowledge”**
 - **We expect contributions in R&D**
 - **From analytical model to open source code (or both ;-)**
 - **Subjects available this afternoon.**





Reading Group

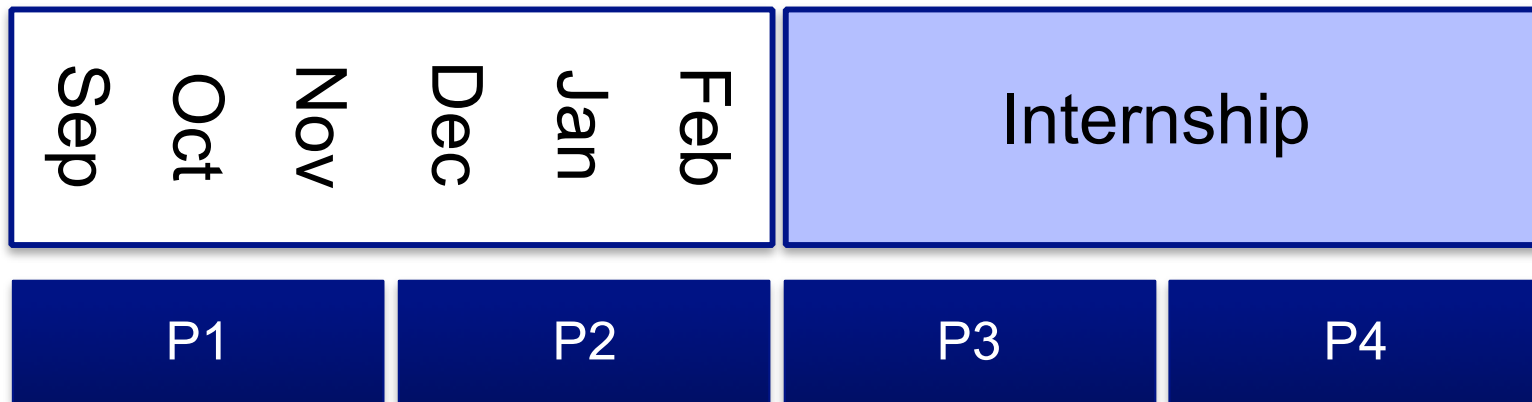


- **Teach:**
 - Practice reading and understanding scientific papers
 - Practice group analysis/criticism of technical work,
 - understand how academic journals and conferences selection process: peer review
 - Practice professional/scientific presentations
- **Fully integrated into your **Scientific Project****
 - **Luigi Iannone is here to **HELP** you**



Practical things: Schedule

- Overall Year Schedule of the ACN Master



Schedule for Period 1

Period 1

Week	M	T	W	Th	F	Remarks (TPT Engineering students)
W1	10/09/2018				14/09/2018	
W2	17/09/2018				21/09/2018	
W3	24/09/2018				28/09/2018	
W4	01/10/2018				05/10/2018	
W5	08/10/2018				12/10/2018	
W6	15/10/2018				19/10/2018	
W7	22/10/2018				26/10/2018	
W8	29/10/2018			1/11/2018	02/11/2018	French Bank Holiday (TPT closed)
W8-bis	05/11/2018				09/11/2018	Séminaire FH (TPT Students)
W9	12/11/2018				16/11/2018	
Break	19/11/2018				23/11/2019	Athens Week (TPT Students)
W10	26/11/2018				30/11/2018	Final Exams
Legend:	Courses		BREAK			

Weekly schedule in P1

Monday	Tuesday	Wednesday	Thursday	Friday
Protocol Verification and Safety	Scientific Project or Free Time	Scientific Project (in lab)	Scientific Project (in lab)	Cellular Access for High Data Rates
Propagation in Graphs	Scientific Project or Free Time	Scientific Project (in lab)	Scientific Project (in lab)	Core IP networks



Courses offered in P1

- **ACN901 Protocol Safety & Verification** (Karthik Bhargavan, Xavier Rival, INRIA)
- **ACN902. Core IP Network** (J.L Rougier, et al. TPT)
- **ACN903. Propagation in Graphs** (Fabien Mathieu, Céline Comte, Nokia Bell Labs)
- **ACN906. Cellular Access for High Data Rates** (M.Coupechoux, P.Martins, A.Vergne, TPT)



Courses offered in P2

- **Cloud Systems** (Maurice Gagnaire, Rémy Sharock)
- **Future Internet** (J.L Rougier, P.Nivaggioli, et al.)
- **Limits of physical communications** (Philippe Jacquet, Nokia Bell Labs)



Administrivia

How to validate ACN

■ Validation of Scientific & Technical Courses

- You need more than 10/20 to pass
- Each course has its own validation rule (small project / oral or written exam / practical labs, ...). It will be explained in details by the teaching staff during the first courses.
- You need to **VALIDATE ALL COURSES**
 - No extra credits, no compensation between courses.
 - It may be possible to retake exams on exceptional conditions

■ Scientific Project (oral defense + short paper)

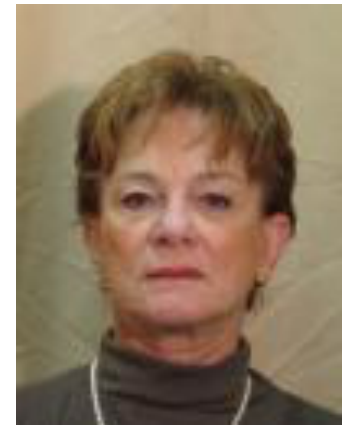
- **This can't be failed !!!**

■ Internship (oral defense + report)

Happy to help...

Contacts

- Questions on a course:
 - see with teachers
- other academic matters (program, ...)
 - Jean-Louis Rougier
rougier@telecom-paristech.fr
- Administrative matters:
 - Ana Kosman: B-64X
ana.kosman@telecom-paristech.fr





Tools

■ Tools

- Time tables, etc. will be managed on Telecom Intranet:
 - synapses.telecom-paristech.fr
 - (links to specific courses web page)
- Mailing lists (should work within a few days)
 - MR2018ACN@listes.telecom-paristech.fr



Today

- **ACN Welcome “buffet” in E200**
 - **With some ACN teachers (from Cisco, INRIA, X, TPT).**
- **This afternoon:**
 - **Registration @ TPT**

- **Courses start on Monday 10th**
- **Stay tuned (more info by emails)**