

METHOD

Methodology for Research in Networking

M2 — Networking
Sorbonne Université

2021-2022

Who?

- ▶ Sébastien Tixeuil, Pr. SU (responsible)
Email: sebastien.tixeuil@lip6.fr
- ▶ Marcelo Dias de Amorim, DR CNRS
Email: marcelo.amorim@lip6.fr

Contact

- ▶ Questions about a specific class
Send message to the professor in charge of that class
- ▶ General question
Send message using the subject: "Subject: [METHOD]..."
- ▶ Website
<https://www-npa.lip6.fr/~tixeuil/m2r/pmwiki.php?n=Main.METHOD>

Objectives of this course

- ▶ Understand what scientific research is
- ▶ Identify the main activities of a researcher
- ▶ Relate these activities to those of technical leaders
- ▶ Exercise some common practices
- ▶ Share

Why this course?

Goes far
beyond
academics

- ▶ Result of an observation over several years
- ▶ Lots of goodwill, insufficient practice...
- ▶ Heterogeneous group of students
- ▶ Resource optimization
 - 1 group discussion vs. N individual discussions
- ▶ Enough time to improve: 14 weeks
 - Instead of 7 weeks a few years ago

Whatever you will do later...

... you will have to apply what
we you will practice here!

It will save you a lot of time

Expectations

- ▶ We have been teaching this course for some time...
- ▶ Self-assessment
 - We could improve and better adapt to the students' needs
 - You will suffer less in the future
 - Continuous improvements (feedbacks appreciated)
 - Works well for the students that **really want** to succeed

Calendar

- ▶ 14 × 4 hours
 - Very dense agenda (in the past, we used to have 7 weeks)
 - Lots of exercises in class, homework, and one final project
- ▶ Schedule
 - Wednesday morning: 8:30 a.m. - 12:45 p.m.

Methodology

- ▶ All classes are exclusively in English
- ▶ Listen, practice, participate, do the assignments
- ▶ This course will require a lot of effort
- ▶ Your participation is fundamental!

Start today

Topics

Reading

Writing

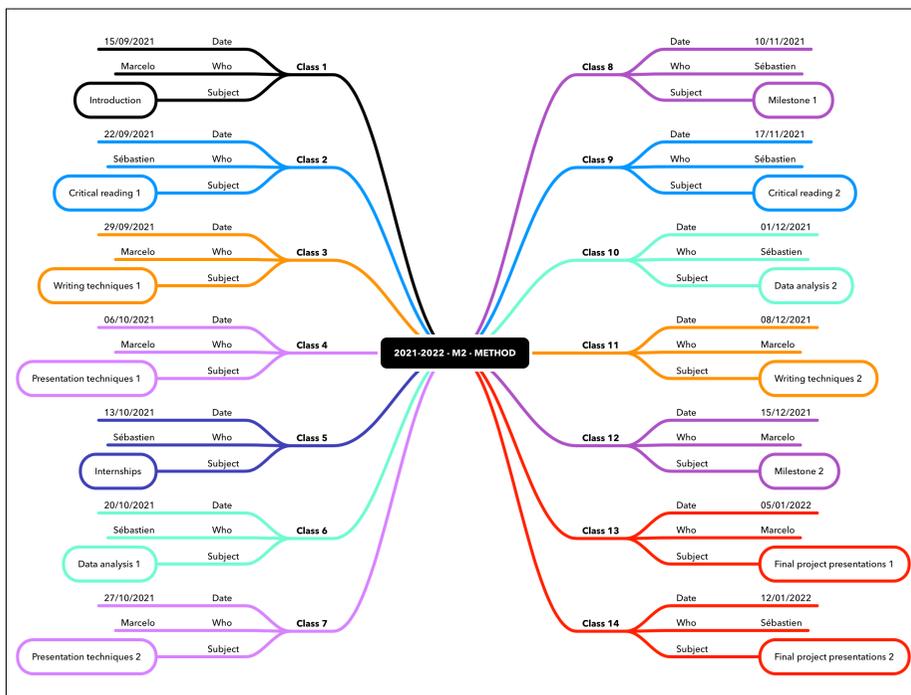
Data analysis

Presenting

- ▶ Milestones
- ▶ Project final presentations
- ▶ Internships

General organization of a class

- ▶ Discussion on homework of previous class (if any)
- ▶ Techniques on a particular topic
E.g.: critical reading, writing
- ▶ Practice
- ▶ Discussion
- ▶ Homework statement for the following class



Evaluation

Detailed in the following slides

- ▶ Homeworks: H
- ▶ Participation and presence in class: C
- ▶ Project: P
- ▶ Final grade:

$$G = 0.4 \times H + 0.2 \times C + 0.4 \times P$$

- ▶ Note that homeworks count a lot!

Homeworks

- ▶ At the end of each class, one homework is assigned
- ▶ The deadline depends on the topic (between 1 and 4 weeks)
 - The deadline is 11 p.m. of the date specified (strict deadline!)
 - E.g., for the first homework, the deadline is September 22, 2021, 11:00 p.m.
- ▶ No homework = zero!
- ▶ How to submit your homework?
 - Through HotCRP on the METHOD webpage
 - No homework accepted by email
- ▶ Template on the webpage (respect the page limit!)

HotCRP

Homework 01 - METHOD 2020-2021 Paper submission deadline in 16 days

Sign in

Welcome to the METHOD 2020-2021 (Homework 01 - METHOD 2020-2021) submissions site.
Sign in to submit or review papers.

Email

Sign me in
 I forgot my password
 IÄTm a new user and want to create an account

Submissions: No deadline
You must sign in to register papers.

Conference information
[Deadlines](#)
[Program committee](#)

HotCRP

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[Create account](#)

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HotCRP

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marcelo.amorim@lip6.fr Profile Help Sign out
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Profile

Program committee [Sebastien.Tixeuil@lip6.fr](#) (User) Search

Please take a moment to enter your affiliation, list your recent collaborators, and update your other contact information. We use your affiliation and recent collaborators to detect paper conflicts; enter None or Unaffiliated if you have none.

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Email
marcelo.amorim@lip6.fr

First name Last name
Marcelo Dias de Amorim

Affiliation
Sorbonne Universit 

Country
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Scroll down (other options must remain untouched)

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Paper submission deadline in 16 days

PHP's systemwide `session.gc_maxlifetime` setting, which is 1440 seconds, is less than HotCRP's preferred session expiration time, which is 86400 seconds. You should update `session.gc_maxlifetime` in the `php.ini` file or users may be booted off the system earlier than you expect.

Search: (All) in Submitted papers Search

Reviews: The average PC member has submitted 0.0 reviews. [details](#) [graphs](#)
As an administrator, you may review [any submitted paper](#).
[Offline reviewing](#)

Recent activity

Submissions: [Start new paper](#) (No deadline)
As an administrator, you can start a paper regardless of deadlines and on behalf of others.

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HotCRP interface showing the "New submission" form. The form includes fields for Title, Submission (PDF, max 15MB), and Authors. The "Save draft" button is visible.

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HotCRP interface showing the "New submission" form. The form includes fields for Title, Submission (PDF, max 15MB), and Authors. The "Save draft" button is visible. Red annotations highlight the Title field (containing "Homework 01 - Embedded attacks in intra-datacenter traffic"), the Submission field, and the Authors list (containing "1. Marcelo Dias de Amorim, Sorbonne Université, marcelo.amorim@lip6.fr"). A red box labeled "Your file!" points to the Submission field.

HotCRP

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Project

Project

- ▶ Student selects the subject (individual work)
 - We will see how later
- ▶ Use all techniques learned for the final project
 - The idea is to follow all steps and provide a scientific paper
 - Defend the idea with a nice presentation
- ▶ Grade:
 - Written document + presentation + quality of contribution

Project

- ▶ Written document
 - 3 pages in PDF (all included, even bibliography)
 - Template available on the website (same for homeworks)
- ▶ Presentation during the 13th or 14th class
 - Jan. 5 or Jan. 12, 2022
 - Duration will depend on the total number of students
- ▶ Deadline for both paper and slides:
 - Wednesday, December 17, 2021, 11 p.m.**
- ▶ HotCRP will be the guardian

Project

- ▶ You will start working on it today

Participation during classes

- ▶ **We will evaluate participation in class**
- ▶ We will call students and explicitly ask for their participation
 - Spontaneous participation also counts
- ▶ Discussion on homeworks are taken into account
- ▶ **All students** will have to participate!

Activity → Homework 1

Homework

- ▶ Select one reference paper from a conference/journal
 - This paper should guide your selection of your project's topic
- ▶ One-page write up with three parts
 1. How did you select this paper and why?
 - Detail your process for selecting paper
 - Explain why you find it interesting
 2. Summary of the reference paper
 3. Short description of your project topic
- ▶ Submit it using the link on the METHOD website
 - Deadline:** September 22, 2021, 11pm

Time for questions!