



IMT Atlantique

Bretagne-Pays de la Loire
École Mines-Télécom

Organization of languages & logics

LaLog – C0
Spring 2025

An introduction to...

- ▶ mathematical tools for computer science
- ▶ two new programming paradigms
- ▶ compilation and typing
- ▶ tools for knowledge representation

0. Introduction (C0 & C1)

1. λ -calculus, functional programming, OCaml

- ▶ Fabien Dagnat – `fabien.dagnat@imt-atlantique.fr`
- ▶ Benjamin Somers – `benjamin.somers@imt-atlantique.fr`
- ▶ Jean-Christophe Bach – `jc.bach@imt-atlantique.fr`

2. Regular expressions, automata, formal grammars

- ▶ Éric Cousin – `eric.cousin@imt-atlantique.fr`

3. Compilation, typing (OCaml) (F. Dagnat & J.-C. Bach)

4. Logics

- ▶ Yannis Haralambous – `yannis.haralambous@imt-atlantique.fr`

- ▶ Theory
 - ▶ quizz for the λ -calculus and OCaml part
 - ▶ formal languages and logics are assessed at the end of LangLog (by an exam)
- ▶ Practice
 - ▶ a stack language compiler written in OCaml
 - ▶ 2 members per compiler group
 - ▶ not doing (or contributing to) the compiler is eliminatory

- ▶ <https://moodle.imt-atlantique.fr/course/view.php?id=806>