

# Implementation of a Linear Session Type System

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- 1 Outline
  - Session Types

- 2 Basics
  - Syntax

The paper *Fundamentals of Session Types* presents a  $\pi$ -calculus equipped with a (linear) type system to check against errors that the system can incur into.

Such language features linear types, which allow checking whether a given channel is used by exactly one process.

The  $\pi$ -calculus' features are incrementally presented through five sections:

- **basics and fundamentals** features, as scope restriction, in sections 2 and 3;
- **recursive types**, needed to write useful unrestricted types, in section 4;
- **unbounded computations**, in section 5;
- **branching and selection**, in section 6.

The implementation process follows this very same organization, and will be presented accordingly.

