

A decorative graphic on the left side of the slide. It features a vertical purple line. To its right, there is a grid of overlapping squares in various shades of purple and blue, creating a stepped effect. The top part of the slide has a dark blue horizontal bar.

Logical Frameworks

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Tasks

- › **Represent *syntax***
 - œ logic
 - œ programming language

- › **Represent *valid rules of inference***
 - œ inference rules
 - œ typing and operational rules

- › **Represent *valid deductions***
 - œ valid proofs
 - œ well-typed programs, valid executions

Design

Safety Proof Language

Safety Proof Language

Logic, Judgements, Inference rules







- › Represent and reason about **object systems**



- › LF makes **adequacy**

Representation (cont'd)



Applications

```
imp_i :
```


