The Lean Focused Research Organization

Sebastian Ullrich (Lean FRO)
Focused Research Organization (FRO)

A new type of nonprofit startup for science developed by Convergent Research

convergentresearch.org
The Lean FRO

5-year mission: address scalability, usability, and proof automation in Lean

Supported by Simons Foundation International, Alfred P. Sloan Foundation, and Richard Merkin

[lean-fro.org](http://lean-fro.org)
The Team

Leo de Moura (AWS)
Chief Architect, Co-Founder

Sebastian Ullrich
Head of Engineering, Co-Founder

Mae Malone
Research Software Engineer

Scott Morrison
Research Software Engineer

Marc Huisinga
Research Software Engineer

...plus three more by the end of the year!
Short-Term Goals

Improve user experience!

- make caching part of build [mathlib4#6603](#)
- fix confusing error message locations [lean4#2393](#)
- eliminate need for cmdline for most common tasks
Short-Term Goals

Establish robust release process for Lean

- tag release candidate at beginning of month
- test ecosystem against it
- stable release at end of month
Longer-Term Goals (Prospective)

- Improve scalability
  - Optimize elaboration & kernel
  - Proof incrementality & parallelism
  - Recompilation avoidance
- Package registry, cloud build
- An even better IDE experience
- Thorough, up-to-date documentation, tooling for courses
- Proof automation
- … and many more