



# **PROOF GENERAL INTRODUCTION**

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# Proof General – A generic frontend for proof assistants

- + originally developed around 1998 for LEGO, Coq, and Isabelle/HOL
- + once supported: Plastic, HOL98, PhoX, ACL2, Casl Consistency Checker, EasyCrypt, HOL Light, Twelf, Isabelle/HOL, Isar
- + currently only qRHL and Coq
- + maintained by Pierre Courtieu, Erik Martin-Dorel, Hendrik Tews as spare time project
- +  $\approx$  50, 000 lines of Emacs Lisp
- + at most one proof assistant per Emacs session
- + read-eval-print loop of proof assistant runs in background
- + big amount of unmaintained functionality that is useless for Coq

# Emacs, Proof General and myself

- + Emacs since 1993, Proof General/Coq since 2011
- + many Proof General contributions for Coq
- + auto background compilation for Coq including -quick, -vio, -vio2vo, -vos, -vok
- + proof tree display
- + omit proofs for speed
- + proof statistics, FAIL annotation for invalid proofs
- + continuous integration for Coq / Emacs version matrix



**THANK YOU**

**Questions?**