Coq 8.*

- Coq 8.5 Recap
- Coq 8.6 Status
- Highlights
- Discussion
Coq 8.5 Main Features

- Asynchronous proof processing, quick compilation
- New proof engine, backtracking, shelving
- Universe polymorphism
- Native compilation
Coq 8.6 Timeline

8.5 freeze 8.6 beta 8.6 final

January 2016 September November

June

Time-based release cycle
Coq 8.6 Roadmap

- Discussed at Coq WGs, PRs on github.
- Feedback welcome (see mail on coq-club)
- ~150 PRs, >80% integrated
- Many bug fixes and performance improvements
- Flagged incompatibilities
A Few Coq 8.6 Features

- State-of-the art universe checking algorithm (J. H. Jourdan)
- Tactic uniformization (H. Herbelin, C. Mangin)
- Binding irrefutable patterns (D. D. Rauglaudre, P. Letouzey)
- Backtracking typeclasses eauto (M. Sozeau)
- Error Resilience in IDEs (E. Tassi)
Current Development Focus

- Work on documentation of dev. practices
- API design & stabilization
- Ease external contributions (PRs, opam)
In the works

• Towards Ltac 2 (P.-M. Pédrot), see CEP #8!

• Typesetting tools and user documentation (C.P. Claudel, …)

• Inductive-Recursive and Inductive-Inductive types, global fixpoints (M. Sozeau)

• …
The Coq Consortium

• Animation of the Coq community
• Develop Coq for industrial & academic partners
• Funding for engineers
• Channel requests & wishes