The Current Projects of the MetaPRL Group

Jason Hickey and Aleksey Nogin

April 26, 1999

Refiner

- (-) Transformation tactics, tactic annotations
- (!/?) Unification, HO unification
- (!) Resource annotation on axioms, rules and theorems
- (-) "Light" tactics mechanism
- (-) Compilation of rewrites to OCaml code
- (-) Smart marshaler with caching and distributed GC
- (!/?/-) Evaluation

Proof Algorithms, Knowledge

- (?) Arithmetic, basic number theory, SupInf
- (?) Theories of common data structures (lists, trees)
- (-) Forward chaining, proof caching
- (?) Reflection
- (-) Porting Ensemble work

Editing

- (-) The helper tool for porting Nuprl theorems to MetaPRL
- (-) Pretty-printing of proofs to ASCII files

Long-Term Projects

- (-) Proof planner
- (-) More theories, e.g. Isabelle, HOL, PVS (already have ITT, CZF, FOL)
- (-) Model checking
- (-) Symbolic algebra