

Projet PiCoq  
Deliverable D5  
December 2011

As stated in deliverable D123, Damien Pous developed a new algorithm for language equivalence of finite state automata, together with Filippo Bonchi. This new algorithm exploits well-known ideas from concurrency theory (bisimulations and bisimulations up-to); it happens to be much faster than the other existing algorithms, including the recent ones based on antichains. The correctness of this algorithm has been formalised in Coq. More information, including the development, is available at <http://perso.ens-lyon.fr/damien.pous/hknt/>.

Alan Schmitt continued formalizing in Coq the equivalence theory of HOcore, with the help of Martn Escarr, a student from University of Rosario, Argentina, who did his last year internship in the Celtique team. The current version of the development is available at <http://www.irisa.fr/celtique/aschmitt/research/hocore/toc.html>.