

Faculty of Mathematics University of Belgrade Serbia http://argo.matf.bg.ac.rs

COST Action IC0901 kick-off meeting, Brussels, Oct 30, 2009.

Group members:

- dr Predrag Janičić
- dr Filip Marić
- Milan Banković
- Mladen Nikolić
- Vesna Pavlović
- Sana Stojanović
- Milena Vujošević-Janičić

Current research areas:

- SAT/SMT solving
- Applications of SAT/SMT solvers
- Geometry reasoning

SAT/SMT solving:

- SAT solver ArgoSAT
- Formal correctness proofs (in Isabelle)
- Heuristics for instance-based selection of parameters
- SMT solver ArgoLib
- New version ArgoSMT is under development (with additional solvers)

Applications of SAT/SMT solvers:

- In timetabling
- In software verification
- For CSP problems
- Novel specification language (that uses SAT/SMT solvers) is under development

Geometry reasoning:

- Dynamic geometry tool GCLC with integrated three theorem provers, based on:
 - area method
 - Wu's method
 - Gröbner bases method
- Theorem prover based on coherent logic under development (with formal proofs exported)

We organized two successful workshops recently:

- Workshop on formal theorem proving and applications (Belgrade, 2008)
- Workshop on formal and automated theorem proving and applications (Belgrade, 2009)
- Workshop 2010 planned for end of January 2010 you will be welcome!