

GCM 2012
Fourth International Workshop on Graph Computation Models
Bremen, Germany, 28-29 September, 2012
Part of ICGT2012

Programme

Location : GW1 B0100

Friday, September 28th 2012

14:25 Welcome address

14:30-16:00 Session 1 (Verification) [chair: Rachid Echahed]

- **Verifying Total Correctness of Graph Programs.** Ch. M. Poskitt and D. Plump.
- **HR* graph conditions between counting-monadic second-order and second-order graph formulas.** H. Radke.
- **A Graph Transformational View on Reductions in NP.** M. Ermler, S. Kuske, M. Luderer and C. Von Toth.

16:00-16:30 Break

16:30-17:30 Session 2 (Applications and Tools) [chair: Detlef Plump]

- **Co-Transformation of Type and Instance Graphs Supporting Merging of Types with Retyping.** F. Mantz, Y. Lamo and G. Taentzer.
- **Big Red: A Development Environment for Bigraphs.** A. Faithfull, G. Perrone and Th. Hildebrandt.
- **XL4C4D -- Adding the Graph Transformation Language XL to CINEMA.** O. Kniemeyer and W. Kurth.

17:30 GCM2012 PC meeting

19:00 GCM Dinner

Saturday, September 29th 2012

9:30-10:30 Session 3 (Formal Languages) [chair: Hans-Jörg Kreowski]

- **Some Remarks on Derivation Languages of DPO Graph Transformation Systems.** N. E. Flick.
- **Some Language Theory for DPO Graph Transformation Systems: Closure Properties.** N. E. Flick.

10:30-11:00 Break

11:00-12:30 Session 4 (Rewriting Approaches) [chair: Dirk Janssens]

- **Graph Rewriting with Contextual Refinement.** B. Hoffmann.
- **Parallel graph grammars with instantiation rules allow efficient structural factorization of virtual vegetation.** K. Smolenova, W. Kurth and P.-H. Cournede.
- **Generalized Cayley Graphs and Cellular Automata over them.** S. Martiel and P. Arrighi.

12:30 Closing

12:45 Lunch