Systems for Integrated Computation and Deduction

The CALCULEMUS IHP Training Network

HPRN-CT-2000-00102

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USAAR Node Report

- Scientific Topics

- Networking

- Training

- Researchers In and Out

Scientific Topics

Task 1.1/2.3   Proof Planning (in ΩMEGA) and the Agent-based suggestion mechanism ΩANTS to integrate Computations into Deduction Systems

Task 1.1   Mathematical representation in Formal Systems

Task 1.2/3.4   MathWeb and MathWeb-SB as a means for the integration of mathematical service systems at the system layer

Task 3.1   OMDOC and MBASE as a means for the formalization, communication and maintenance of mathematical documents

Task 3.2   Support of formal methods approaches by networks of mathematical service systems; investigation of potential industrial-strength applications

Task 3.3/3.5   Different case studies; applications in maths education (ACTIVE-MATH, DIALOG)

Networking: System Devel.

- **MathWeb-SB** (see also talk of Jürgen Zimmer)

  - installed at:

    USAAR, UBIR, UGE, UED, CMU, . . . , *Warwick, London*

  - integrates:

    > 20 heterogeneous mathematical service systems

- the ΩMEGA proof planner is employed at

  USAAR and UBIR

  joint work with UED and TUE

- OMDOC and MBASE meanwhile employed in various systems

  joint work with UWB
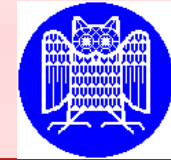
Networking and Training

General Activities

- Coordination of Network

- Organisation of Calculemus Autumn School (jointly with UKA)

- Midterm Review Meeting, general Organisation and Coordination

Training Activities

- Training by courses, talks and individual supervision

- DFKI and its industrial partners for training

- organisation/participation in special tutorials and workshops: CIAO, CALCULEMUS-Monet, ΩMEGA-THEOREMA, ΩMEGA-UBIR

- involvement in internships of

  - Corrado Giromini and Jürgen Zimmer (organised by UED)

  - Andreas Meier

USAAR In and Out

In   from

- Andrew Adams   Reading, UK
- Corrado Giromini   UGE, I
- Pasquale de Lucia   UGE, I
- Markus Moschner   Vienna, A
- Silvio Ranise   UGE& Nancy
- (Simon Colton)   UED
- (Mateja Jamnik)   UBIR

Out   to

- Jürgen Zimmer   UGE, UED
- Martin Pollet   UBIR
- Andreas Meier   UBIR
- (Malte Hübner)   UED
- (Myself)   UBIR,UED