Towards a Roadmap for Future Satellite Gravity Missions

September 30 – October 2, 2009

Graz University of Technology

Workshop on
The Future of Satellite Gravitmetry,

12–13 April 2007, ESTEC; Noordwijk

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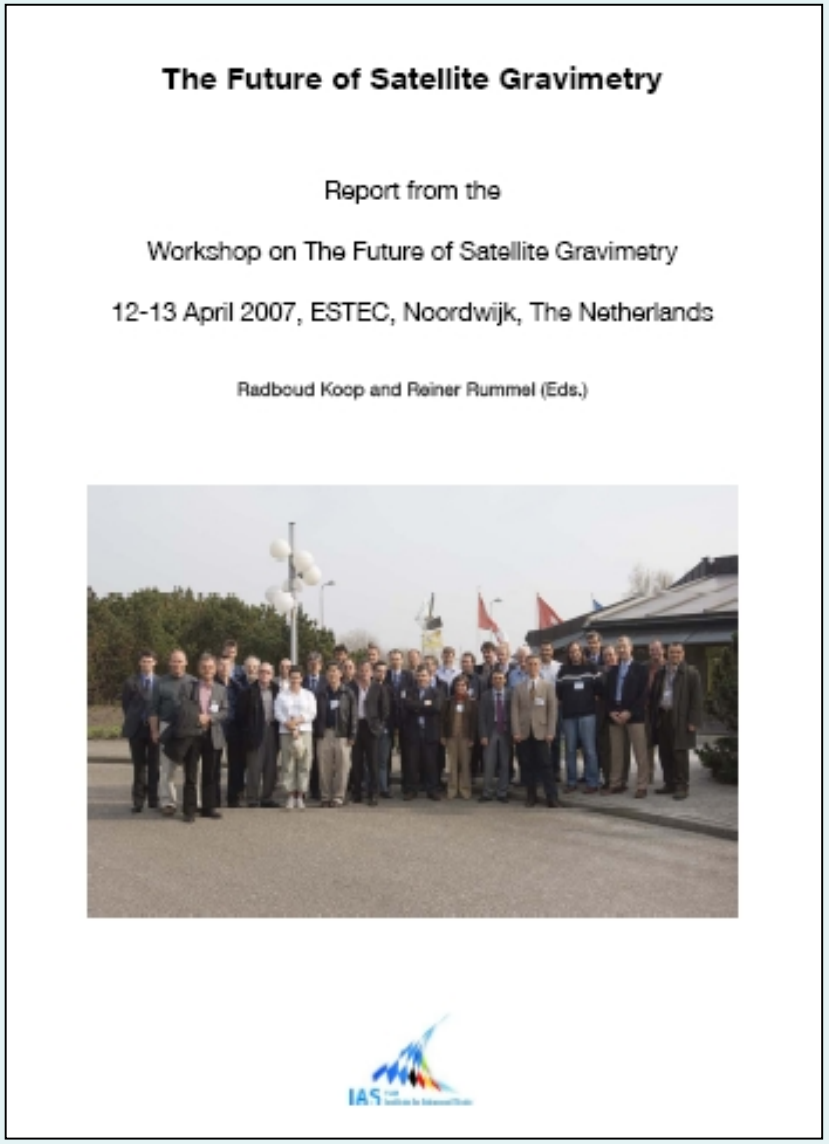

Workshop objectives

- To establish a **roadmap** for future gravity satellite missions, including
  - a short-term perspective (GRACE follow-on)
  - a medium to long-term perspective
- which is in agreement with the user requirements as well as the programmatic boundary conditions of the space agencies.
- This roadmap shall include as a key element a matrix of generalized mission concepts addressing:
  - mission requirements (derived from user requirements) and expected performance;
  - pros & cons of the mission concept;
  - level of technological maturity and expected qualification time;
  - level of readiness of supporting science and identification of remaining scientific challenges (e.g., background models, temporal and spatial aliasing, etc.);
  - complementarity with other data sources;
  - cost estimates.
- It shall also cover a timeline including key milestones.

Workshop objectives

Based on this inventory, the planning of **future activities** can be done:

- **Science**:
  - Which scientific studies are necessary to solve the remaining scientific challenges?
  - How can we involve experts from neighbor communities to support us in solving open scientific problems?
- **Technology**:
  - Which is the baseline technology to go for?
  - Which residual technological developments have to be performed?
- **Organization**
  - How to organize the community (and their presently rather scattered efforts) from this moment to a coherent one for the future?
  - How can we set-up permanent links to all relevant user communities?
  - How can we keep track on the balance of the progress in science and technology?

Program (overview)

Wednesday

09:00 – 10:40	**P1**: Status, Requirements and Challenges		
10:40 – 11:00	Coffee Break		
11:00 – 11:20	Introduction to Breakout Sessions		
11:20 – 12:40	**B1** A306 Mission requirements	**B2** BE01 Mission design	**B3** A111 Data proc., modelling & interpret.
12:40 – 14:00	Lunch (buffet)		
14:00 – 15:40	**B1** A306 ctd‘	**B2** BE01 ctd‘	**B3** A111 ctd‘
15:40 – 16:00	Coffee Break		
16:00 – 16:30	**P2a**: Reports from the Breakout Sessions		
16:30 – 18:00	**P2b**: The Space Agencies: Programs and Boundary Conditions		
19:00 – 21:00	No-Host Dinner		

Program (overview)

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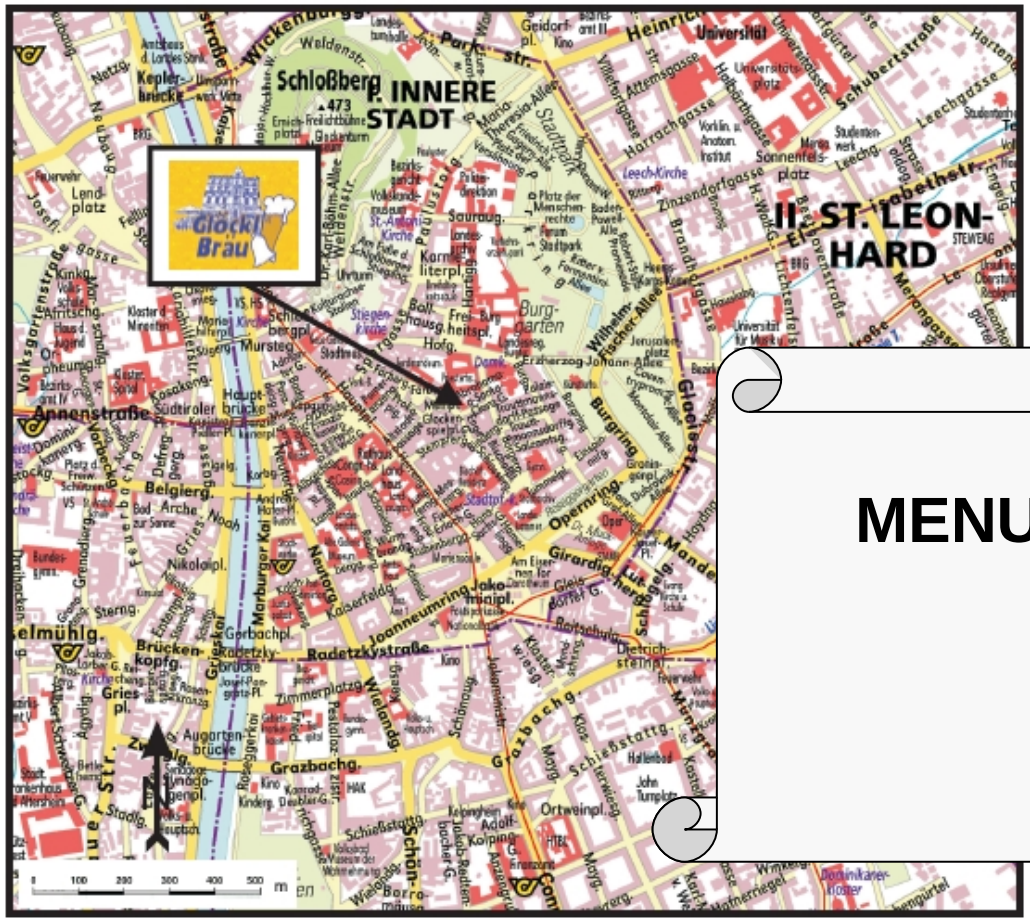

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Thursday

Program (overview)

09:00 – 10:40	**B4** BE01 Integration of mission design, data proc. & candidate technology	**B5** A306 Future products and services	**B6** A111 Roadmap and declarations
10:40 – 11:00	Coffee Break		
11:00 – 12:40	**B4** BE01 ctd‘	**B5** A306 ctd‘	**B6** A111 ctd‘
12:40 – 14:00	Lunch (buffet)		
14:00 – 15:40	**P3**: Reports from the Breakout Sessions		
15:40 – 16:00	Coffee Break		
16:00 – 18:00	**P4**: Roadmap and Declarations		
19:00 – 21:00	Workshop Dinner		

Program (overview)

Program (overview)

Friday

09:00 – 10:40	**P5**: Steps towards the implementation: The long-term perspective
10:40 – 11:00	Coffee Break
11:00 – 12:15	**P6**: Steps towards the implementation: The short-term perspective
12:15 – 13:15	Lunch (buffet)
13:15 – 15:00	**P7**: Final discussion of roadmap and declaration
15:00	Adjourn