
Highlights of Track 5: Simulation & Modelling

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Topics covered:

- Classic Spacecraft Simulators
- Special Purpose Simulators
 - Navigation Systems
 - Mechanical Behaviour
- Modelling Schemes & Methodologies

Spacecraft & Experiment Simulators

New Aspects described included

- faster than realtime
- PC-based portable systems
- graphical development strategies
- integration of special purpose simulators for utilization as verification tool before updating on-board software

Special Purpose Simulators

Interesting new ideas included

- Simulation for the Galileo manoeuvres
- IRS-P3 Navigation System Simulation
- Attitude Simulation

Modelling Schemes & Methodologies

Conventional modelling topics included:

- Satellite based systems
- Spacecraft behaviour
- Flight dynamics

More unusual ideas included:

- Cost modelling
- Hardware & software performance modelling
- Modelling of spacecraft operations functions

Conclusion

- Many new ideas presented
- Interesting use of modelling for new areas
- Modelling & Simulation are increasingly utilized to reduce costs