Cluster Software Engineering

SEN

Paul Klint
SEN

a broad software engineering agenda

Paul Klint
SEN1 & clusterleader

Frank de Boer
SEN3

Han LaPoutre
SEN4

Dick Bulterman
SEN5
SEN

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- **SEN1**: Software Analysis & Transformation
  - Software renovation; DSLs; forensics; auditing
- **SEN3**: Foundations of Software Engineering
  - Co-algebra; coordination; multi-core programming
- **SEN4**: Multi-agent and adaptive computation
  - Logistics; Energy; Economics
- **SEN5**: Distributed and Interactive Systems
  - Multi-media authoring and time-bounded delivery
SEN: Thematic Cohesion

SEN1
Software Analysis and Transformation

 SEN3
Foundations of Software Engineering

 SEN5
Distributed and Interactive Systems

 SEN4
Multi-agent and Adaptive Computation

Model-based analysis
Evolution
Timed concurrency
Decentralized paradigms
Agents

DSLs
SEN: Research

*a broad software engineering agenda*

Contribution to all strategic themes:

- Earth and Life Sciences (SEN1, SEN3)
- Data explosion (SEN1, SEN5)
- Societal logistics (SEN4)
- Software as service (SEN1, SEN3, SEN4, SEN5)
SEN: Personnel

- 299 FTE in the period 2005-2010
- On Average: 50 FTE/year
- 16% tenured staff
- 12% Univ. professors (7)
SEN: Productive

- 1362 publications
- 227 on average/year
- 4.6 pub/FTE/year
SEN: Responsible

- SEN1, SEN4 and SEN5 have integrated researchers and programmers from other parts of CWI
- Many duties in academia (PhD committees, etc.)
- High-profile positions in science policy:
  - Chair IPN
  - Member TWINS (Royal Academy Scientific Council)
  - Member many NWO selection committees
  - Scientific committee Dagstuhl, Lorentz Center, …
- Strategic networking: ICT Labs, INRIA
SEN: Role of Cluster

- Common global view on research
- Strong, responsible, group leaders
- Mutual coaching group leaders in trusted context
- Platform for discussing common concerns
  - Joint proposals
  - Getting good PhD candidates
  - Internal organization/communication CWI
  - (CWI and general) funding for computer science
- Social platform
SEN: Social Event (June 24)
Further Background

- www.cwi.nl/sen1
- www.cwi.nl/sen3
- www.cwi.nl/sen4
- www.cwi.nl/sen5