



# The 1st European Conference on Science, Art and Technology in the Service of Man

September 7th - 9th, 2006  
Main Building, University of Helsinki, Finland



## SAT 2006 Ohjelma – Programme

### KONFERENSSIN PÄÄPUHUJAT / Keynote speakers

**Robert A. Reinstein:** Science, Art, Philosophy & Religion

**Jean-Claude Rissét:** Art as an inspiration to science and technology, and the computer as an interface: the case of music

**Anders Brahma:** The Beauty of Medical Radiation Physics in Cancer Therapy

**Pekka Korhonen:** Benchmarking Using Value Efficiency Analysis

**Shuji Nakamura:** Millennium-tekniologiapalkinnon 2006 voittaja / Millennium prize winner 2006



**SAT 2006 -konferenssin suojelija on tasavallan presidentti Tarja Halonen.**

Patron of the Conference is Tarja Halonen, President of the Republic of Finland

### Thursday, September 7th

17:00 Opening ceremony, Main festival hall  
Opening of the conference  
Acknowledgements

18:00 KeyNote speech, Main festival hall  
**Robert A. Reinstein:** Science, Art, Philosophy & Religion

19:00 Conference dinner, University vestibule (old side)

### Friday, September 8th

9:00 KeyNote Speech, Main festival hall  
**Anders Brahma:** The Beauty of Medical Radiation Physics in Cancer Therapy

#### 10:00 Parallel session 1

#### 1A: Technology & Visual Arts

Small festival hall  
10:00 Nicholas Wade: Scientific Art or Artistic Science?  
10:30 Wille Mäkelä: Drawing into the air: a new method for fine arts expression?  
11:00 Toshihiro Bando: Anisotropic Evaluation of Mondrian-like Patterns  
11:30 Lauri Gröhn: Music generated from pictures  
12:00 Artur Lugmayr: Dialogue between Art and Science on the Example of Digital Film Making

#### 1B: Modern Techniques in Health Care

Auditorium

10:00 Riitta Hari: Reading Brains and Minds: An introduction to modern brain imaging  
10:30 Mika Teräs: Positron Emission tomography - A method to see the function of the brain  
11:00 Päivi Maarit Arponen: Individual functional imaging and measurements on normal tissue response in radiotherapy  
11:30 Jukka Jurvelin: Medical physics in diagnostics of musculoskeletal diseases

12:00 Lunch

#### 13:30 Parallel session 2

#### 2A: Technology & Music

Small festival hall

13:30 Otto Romanowski: The History and Future of Computer Music  
14:00 Petri Saarikoski: Commodore 64, Instrument of Computer Music – The Cultural History of Sound Interface Device (SID)  
14:30 Heidi-Maria Lehtonen: Towards the next generation digital pianos

#### 2B: Modern Techniques in Health Care II

Auditorium

13:30 Ari Pääkkönen: Wires and Electrodes inside the Head – Intracranial Recordings in the Course of Epilepsy Surgery  
14:00 Juha Töyräs: Navigated magnetic stimulation of the brain – a new brain mapping modality  
14:30 Mikko Tenhunen: Intensity-modulated radiotherapy in carcinomas of head and neck  
15:00 Coffee, Vestibule (new side)  
15:30 Pekka Vallittu: What Biomaterials Science can Provide for Reconstructive Medicine Now and in the Future

#### 15:30 Parallel session 3

#### 3A: Future of Technology & Society

Small festival hall

15:30 Hannu H. Kari (to be specified)  
16:00 Jarmo Määttänen: Moore's future is more  
16:30 Hannu Eskola: Neoreality – parallel physical and electronic realities  
17:00 Timo Vuorensola: Star Wreck  
17:30 KeyNote speech, Main festival hall

## Programme

Time	Thursday, September 7	Friday, September 8	Saturday, September 9	Sunday, September 10
09:00		KeyNote 2 (Brahme)	KeyNote 4 (Korhonen)	
10:00		Parallel session 1	Parallel session 4	
12:00		Lunch	Lunch	Excursions
12:30		Parallel session 2	KeyNote 5 (Millennium prize winner 2006)	
13:30		Coffee		
15:30		Parallel Session 3		
17:00	Opening Ceremony	KeyNote 3 (Rissét)	Vantaa City Reception	
18:00	KeyNote 1(Reinstein)	Helsinki City Reception		
19:00	Conference Dinner	Concert (Helsinki Conservatory)		
21:00				

**Jean-Claude Rissét:** Art as an Inspiration to Science and Technology, and the Computer as an Interface: the Case of Music

19:00 Helsinki City reception, City hall

21:00 Concert (Sibelius Academy), The Helsinki Conservatory of Music

### Saturday, September 9th

09:00 KeyNote speech, Main festival hall  
**Pekka Korhonen:** Benchmarking Using Value Efficiency Analysis

#### 10:00 Parallel session 4

#### 4A: Science, Technology & Experience,

Small festival hall

10:00 Lauri Gröhn: Music Generated from Pictures  
10:30 Eeva Pilke: Psychological and esthetic view of enjoyment in interactions with information technology  
11:00 Rebekah Ann Rousi: Physicalising the Digital: digital art in the physical age  
11:30 Tapio Takala: Towards a Virtual Opera

#### 4B: Applications and Methods in Science & Technology

Auditorium

10:00 Joop Spronk: Why Multiple Goals in Finance?

10:30 Kaisa Miettinen: Introduction to Multiobjective Optimization with Some Applications

11:00 Sergey Korotov: New computational technologies for reliable computer simulations

11:30 Antti Lauri: Does money make the world go round? The journey of Euro coins and banknotes as a diffusion process

12:00 Lunch

13:00 Departure to Heureka Science Centre from Senate square

14:00 KeyNote speech, Heureka Science Centre

**Shuji Nakamura,** Millennium prize winner 2006

15:00 Vantaa City reception, Heureka Science Center

### ILMOITTAUDU SAT 2006 -KONFERENSSIIN

**Konferenssin osallistumismaksu on TEKin, SMFL:n ja Sairaalaafysikot ry:n jäseniltä 200 euroa (muilta 250 euroa, opiskelijoilta 75 euroa). Hinta sisältää monipuolisen ohjelman lisäksi konferenssikirjan, ohjelmakirjaseen, laukun, konferenssi-illallisen, osallistumisen Helsingin kaupungin vastaanotolle sekä kahvit tauolla.**

**Ilmoittautuminen ja lisätietoja / Registration and further information:  
www.sat2006.com**

NOTE: The tentative conference programme is subject to change.