

**SAGA FALL SCHOOL**  
**Kolympari, Crete, October 4-8, 2010**  
Program

Monday, October 4

Morning Session – SAGA Midterm Review

with the Project Officer from REA (Research Executive Agency)

**mandatory for all SAGA teams, and members of the Advisory Board if present**

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| 09:00-09:10 | Introduction<br>Speakers: Gianluca Coluccio (Project Officer, REA),<br>Tor Dokken (SAGA coordinator)  |
| 09:10-10:00 | Tour de Table: brief (5 min) introduction of each team and its role<br>Speakers: Scientists-in-Charge   |
| 10:00-10:45 | Coordinator's Report: Scientific, Training, Networking,<br>Management aspects. Speaker: Tor Dokken (SAGA coordinator)   |
| 10:45-11:00 | Coffee break  |
| 11:00-13:00 | Short presentations (less than 10 minutes) of each fellow, his/her<br>individual scientific project but also expectations about the project<br>Speakers: the recruited SAGA fellows (10 ESR + 3 ER) |
| 13:00-15:00 | Lunch break   |

Afternoon Session – SAGA Midterm Review and Opening Lecture of the School

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| 15:00-17:00 | Closed discussion of the Project Officer with the SAGA fellows<br><i>In parallel:</i><br>Business meeting of the Steering Committee and Advisory Board |
| 17:00-17:30 | Coffee break   |
| 17:30-18:15 | Open discussion for summarizing the results and for future plans   |
| 18:15       | Opening of the school event  |
| 18:20-19:50 | The history of CAD and examples of its use in industry<br>Speaker: Tor Dokken, SINTEF  |
| 20:30       | Dinner   |
| 21:30       | Welcome Party with all participants  |

Tuesday, October 5  
Morning Session – The Industrial Context of CAD

- 09:00 Welcome by the hosts (OAC)
- 09:15-10:15 Invited lecture: CAD in the aerospace industry  
Speaker: Thomas Grandine, The Boeing Company, Seattle
- 10:15-10:30 Coffee Break
- 10:30-11:45 Invited lecture:  
Overview of the market and current vendors  
Overview of current hardware/software requirements  
Overview of PDM-PLM concepts  
Speaker: Dominique Laffret, Missler
- 11:45-12:00 Break
- 12:00-13:00 Invited lecture: CAD in the shipping industry  
Speaker: Panagiotis Kaklis, National Technical University of Athens
- 13:00-15:00 Lunch break

Afternoon Session – Introduction to TopSolid and Complementary Skills Lecture

- 15:00-16:30 Interactive introduction to TopSolid  
Speakers: Missler
- 16:30-17:00 Coffee break
- 17:00-18:30 TopSolid – A sample open industrial problem  
Speakers: Missler
- 18:30-18:45 Break
- 18:45-20:15 Lecture and discussion:  
Communicating science to journalists and the general public  
Speaker: Dana Mackenzie, free-lance science journalist, USA
- 20:30 Dinner
- 21:30 Evening program for young scientists  
*to be planned by the SAGA fellows and other students*

Wednesday, October 6

Morning Session – Invited Lecture and Problem Session

- 09:00-10:00      Invited lecture: Implicitization techniques – a fruitful interaction between practitioners and algebraists  
Speaker: Alicia Dickenstein, University of Buenos Aires
- 10:00-10:20      Coffee break
- 10:20-11:00      Contributed lectures  
- Parametrisation in Isogeometric Analysis. Jens Gravesen (DTU)  
-The DMM bound: multivariate (aggregate) separation bounds.  
Elias Tsigaridas (Aarhus)
- 11:00-12:30      Presentation and discussion of selected open problems  
Speaker: Panagiotis Kaklis, National Technical University of Athens
- 12:30-16:00      Lunch break

Afternoon Session – Excursion

- 16:00              Group Photo
- 16:15              Bus Trip to the city of Chania:  
Guided Visit to the Archeological museum and the Old city
- 20:00              Dinner at Chania

Thursday, October 7

Morning Session – Contributed Lectures and Problem Session

- 9:00-10:20            Contributed lectures
- Shape-preserving interpolation in two and three dimensions.  
Menelaos Karavelas (U. Crete)
  - Distance computation using quadratically supported curves  
Adrien Poteaux (JKU)
  - Simple Approximate Varieties for Sets of Empirical Data,  
Maria-Laura Torrente (U. Genova)
  - Dimension of  $C^1$  spline spaces on the plane,  
Nelly Villamizar (U. Oslo)
- 10:20-10:50            Coffee break
- 10:50-12:30            Presentation and discussion of selected open problems  
Speaker: Thomas Grandine, The Boeing Company
- 12:30-15:00            Lunch break

Afternoon Session – Problem and Poster Sessions

- 15:00-17:00            Presentation and discussion of selected open problems  
Speaker: Alicia Dickenstein, University of Buenos Aires
- 17:00-19:00            Poster Session (with coffee)
- 20:30                    Dinner

Friday, October 8

Morning Session – Contributed Lectures and Problem Session

- 9:00-10:20            Contributed lectures  
- Computing reflective symmetries for B-Rep NURBS volumes.  
Jean-Claude Leon (Grenoble-INP)  
- Solving the curve/curve and curve/surface intersection problems  
with Mathemagix. Thang Luu Ba (INRIA Sophia Antipolis)  
- Wooden reconstruction using a quasi-isopycnic model  
approximation. Bruno Manuel Gameiro Simoes (Grafitech)  
- Software Development for Industrial Applications using the  
example of a Dip Paint Simulation. Martin Schifko (JKU)(30')
- 10:30-10:50            Coffee break
- 10:50-12:30            Presentation and discussion of selected open problems  
Speaker: Tor Dokken, SINTEF
- 12:30-15:00            Lunch break

Afternoon Session – Complementary Skills Session and Panel Discussion

- 15:00-16:30            Interactive session and discussion on communicating science  
Moderator: Dana Mackenzie, free-lance science journalist, USA
- 16:30-16:50            Coffee break
- 16:50-17:30            Contributed lectures  
- Some Remarks on Intellectual Property Rights.  
Ewald Quak (Sintef)  
- The Journal of Mathematics in Industry. Martin Peters (Springer)
- 17:30-18:30            Panel discussion with the experts present on the evolutions of the  
future
- 18:30                    Closing of the school event
- 20:30                    Dinner
- Farewell party