

**Inverse Problem Methodologies Technical Division**  
SEM Annual Meeting  
Tuesday June 8, 2010, 12.10 pm, Grand Hall Alcove SE  
Indianapolis, IN USA  
**Minutes of the meeting**

**Chair:** Hugo SOL ([hugos@vub.ac.be](mailto:hugos@vub.ac.be))

**Vice-chair:** Katia GENOVESE ([genovese@unibas.it](mailto:genovese@unibas.it))

**Secretary:** John CONSIDINE ([jconsidine@fs.fed.us](mailto:jconsidine@fs.fed.us)) (acting chair)

**1) List of attendees:**

John CONSIDINE ([jconsidine@fs.fed.us](mailto:jconsidine@fs.fed.us)), Michel GREDIAC ([michel.grediac@univ-bpclermont.fr](mailto:michel.grediac@univ-bpclermont.fr)), David JOHNSON ([david.johnson@udri.udayton.edu](mailto:david.johnson@udri.udayton.edu)), Eann PATTERSON ([eann@egr.msu.edu](mailto:eann@egr.msu.edu)), Fabrice PIERRON ([fabrice.pierron@chalons.ensam.fr](mailto:fabrice.pierron@chalons.ensam.fr)), Marco ROSSI ([marco.rossi@ensam.eu](mailto:marco.rossi@ensam.eu)), Marco SASSO ([m.sasso@univpm.it](mailto:m.sasso@univpm.it))

**2) Apologies:**

Hugo SOL ([hugos@vub.ac.be](mailto:hugos@vub.ac.be)), Katia GENOVESE ([genovese@unibas.it](mailto:genovese@unibas.it))

**3) Administration:**

In absence of the TD Chair and Vice-chair, John Considine was acting-chair for the meeting.

**4) Business:**

- a) Motion by Hugo SOL (presented by John CONSIDINE in his absence): Since TD 'Inverse Problems' has overlap with 'Application of Imaging Techniques to Mechanics of Materials and Structures', I propose to temporarily dissolve 'Inverse Problems' until sufficient researchers come forward to support the TD.
  - i) Discussion: Consensus was IPM TD was small but vibrant. Attendance at the TD meeting did not represent SEM members working in the area and many SEM members try to participate in more than one TD. IPM track was been very well-attended.
  - ii) Decision: Unanimous to continue IPM TD.
- b) Officers for 2010-2012: Hugo SOL wishes to become more active in other TDs and has submitted his resignation as chair of IPM TD. After nomination and voting, new officers for the terms 2010-2012 are:  
Chair: Katia GENOVESE  
Vice-chair: John CONSIDINE  
Secretary: Marco SASSO

**5) Report of division activity in 2009-2010:** the IPM TD has been active in the following areas.

- a) Organization of sessions at the 2010 meeting:  
Fabrice PIERRON organized a track entitled "Application of imaging techniques to mechanics of materials and structures". Within this track, the TD organized/co-organized the following sessions:
  - i) Identification from full-field measurements: biological materials (Organizers: F. PIERRON, K.J. GRANDE-ALLEN, S. AVRIL, C. FURLONG, B.C. PROROK, F. BARTHELAT) (with Biological Systems and Materials TD)
  - ii) Identification from full-field measurements: Soft Materials (Organizers: J. CONSIDINE, F. PIERRON) (with Image Techniques TD)

- iii) Identification from full-field measurements: Composites (Organizers: P.G. IFJU, F. PIERRON)
- iv) Identification from full-field measurements: Model Identification/Inverse Problem (Organizers: F.PIERRON, J CONSIDINE, M. ROSSI)

**6) Activity for 2010-2011:**

a) **BSSM**

Eann PATTERSON requested IPM TD make a strong presence at the joint BSSM/SEM meeting in Edinburgh, UK, 7-9 September 2011. He was willing to coordinate our activity with BSSM for the meeting. Several members expressed interest in attending and presenting.

b) **Grediac course**

Michel GREDIAC and coworkers will be presenting a course on full-field measurement and analysis techniques prior to the IUTAM meeting in Paris next summer.

c) **Short course**

Fabrice PIERRON is planning a short course on Inverse Methods for the 2011 SEM meeting.

d) **2011 SEM Meeting**

Members agreed to work toward the following sessions for the upcoming meeting.

- Identification from Full-Field Measurements-General Session (2 sessions): Organizer-Fabrice PIERRON
- Identification from Full-Field Measurements-Biological Systems: co-sponsored with Biological Systems & Materials TD: Organizer-Fabrice PIERRON
- Identification from Full-Field Measurements-Residual Stress: co-sponsored with Residual Stress TD: Organizer-Fabrice PIERRON
- Identification from Full-Field Measurements-Dynamic Behavior of Materials: co-sponsored with Dynamic Behavior of Materials TD: Organizer: none at this time
- Identification from Full-Field Measurements-Optical Methods: co-sponsored with Optical Methods & Applied Photoelasticity TD: Organizer: none at this time

Respectfully submitted,  
J. Considine, Secretary