## Scope

This two-day symposium targets material scientists, civil engineers, mechanicians, applied mathematicians and engineers from academia and industry interested in Applied & Computational Mechanics and their related industrial applications.

The objectives of the symposium are to present and discuss state of the art with new advances and research results in the fields of Applied and Computational Mechanics.

The workshop will include invited speakers and a poster session. PhD students are strongly encouraged to submit abstracts for the poster session.

## Call for abstracts

PhD students are strongly encouraged to submit abstracts (1 page with bibliographies in English or French) for the poster session.

Attendance to the meeting is free but due to the limited number of participants, pre-registration and confirmation of attendance is compulsory.

## Deadlines

Abstract submission: November 13th, 2016
Notification of acceptance: November 14th, 2016
Confirmation of attendance: November 14th 2016
Send an e-mail to:
**workshop.mechanics.enit@gmail.com**
Please do not forget to specify your name, affiliation, status (student, academic researcher, industrial researcher, etc…) and email address.

## General information

The symposium will take place at the National School of Engineering of Tunis (ENIT) in Tunis. The working languages of the symposium are English and French.

## Contact

All queries concerning the event should be sent by email to:
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## Program

**Thursday November 24th 2016**
**08h45:** Symposium Opening by Professor Hatem ZENZRI, Director of ENIT
**09h00:** Ziad MOUMNI, ENSTA-ParisTech France
A comprehensive approach for fatigue analysis of shape memory alloys
**10h00:** Amel BEN ABDA, ENIT, Boundary data recovery from partially overdetermined boundary conditions in linear elasticity
**10h30:** Coffee breaks and Poster session
**11hh00:** Tarek MABROUKI, ENIT, Modélisation et simulation des procédés de fabrication : nouvelle frontière
**11h30:** Karim MILLED, ENIT, Une nouvelle approche micromécanique analytique pour la prédiction des déformations élastiques et visqueuses des composites cimentaires
**14h00:** Yves RENARD, INSA de Lyon France, Méthodes de domaine fictif avec éléments coupés pour les problèmes de contact unilatéraux
**15h00:** Wiem BEN HASSINE, ENIT, Compressive response of concrete derived by a temperature dependent damage model
**15h30: :** Seddik SKHIRI, ENIB, Modélisation numérique des structures coques en dynamique rapide
**16h00:** Coffee breaks and Poster session
**17h00:** Adel HAMDI, ENIT
Fatigue des pieces caoutchoutiques

**Friday November 25th 2016**
**09h00:** Jean-Jacques MARIGO, Ecole Polytechnique France
Crack nucleation and crack propagation with gradient damage or cohesive force models
**10h00:** Nabil GMATI, ENIT, Résolution d'un problème de diffraction d'ondes électromagnétiques par un couplage Éléments Finis et représentation intégrale.
**10h30:** Coffee breaks and Poster session
**11h00:** Rached ELFATMI, ENIT, Mécanique des poutres composites: équilibre thermo-élastique et vibration
**11h30:** Othman BEN MEKKI, ENIT, Dynamic mechanical modelling of stay-cables under thermal loads.
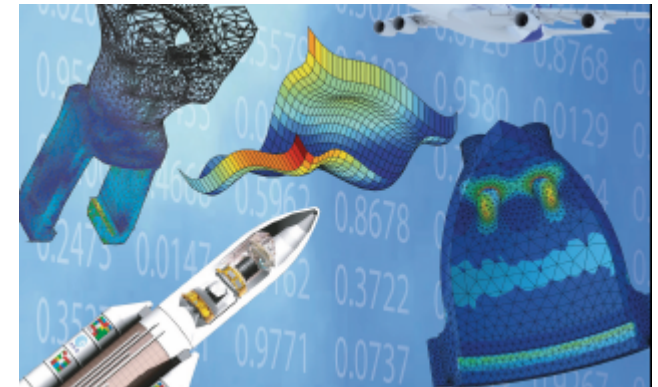**14h00:** Patrick MASSIN, ENSTA-Paristech/EDF France
Propagation 3D de fissures cohésives X-FEM
**15h00:** Maher MOAKHER, ENIT, Multiscale fouth-order models for image restoration, impainting and low-dimensional sets recovery

# Symposium
# Applied & Computational
# Mechanics

**November, 24th and 25th, 2016 at ENIT**



**Organised by**

**Applied Mechanics & Engineering Laboratory**

**Civil Engineering Laboratory**

**Mathematical & Numerical Modelling for Engineering Science Laboratory**