

Research Grants for PhD students from the China Scholarship Council

Information Form (please read the guidelines carefully on the website www-csc.utt.fr)

Supervisor's name : Given names :

Status (prof., assistant prof., ...) :

Laboratory : Website address :

Institution : Website address :

Scientific competence of the supervisor:

Prof. P. Boisse heads the team Multimap (Multiphysics mechanics for materials and processes) of LAMCOS laboratory (UMR CNRS 5259). He conducts research in the field of the theoretical mechanical behaviour of materials at different scales.

P. Boisse is Membre of 'Institut Universitaire de France' <http://www.iufrance.fr/>

Two major publications in the field proposed for the PhD :

1.

2.

Website address of the personal page :

Supervisor's email :

Description of the research work proposed for a PhD

Topic # (see list) :

Title :

Subject :

Plate and shell theories have been developed over the last decades to give approximate solutions to the deformation of thin structures. The most classical theories are the Kirchhoff theory where transverse shear is assumed to be zero, and the Mindlin theory where transverse shear exists. When the shells are composed of fibres, these theories are not valid, especially because of the quasi incompressibility of the fibres. The aim of this Ph.D. is to propose develop and validate alternative theories of shells that can reflect the behaviour of fibrous shells. The work will be based on preliminary studies carried out at LAMCOS (Publications 1 and 2 above).

Keywords :

Expected collaborations :

Background required from the applicant :

Existence of a PDF file detailing the proposal ("yes" or "no") :

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