



INVITATION

I have the great honor, and the great pleasure, to inform you of the defense of my Thesis entitled:

Advanced Signal Processing Algorithms for States Estimation, Modeling and Damage Detection With Applications To Structural Health Monitoring

In the past 30 years, there had been a growth in the numbers of civil structures such as bridges, dams, power utilities, high-rise buildings, retaining walls, etc., which have increased dramatically with the increase in construction presented in the fifties and sixties. Therefore, many strategies have been developed for maintenance, inspection and assessment of out infrastructures.

The most well known used strategy is the civil Structural Health Monitoring (SHM).SHM is a method for monitoring and performance evaluation of civil structures. It helps to assess old structures in an effective way and reduce the cost for rebuilding. Thus, the development and implementation of more effective SHM techniques is a critical task for engineering structures, in order to maximize safety and minimize maintenance cost.

Therefore, the main objectives of this thesis are to develop a new damage detection techniques in SHM systems, which can effectively address the effects of changing system environmental or operational conditions and have potential to be applied in practice to more effectively solve practical SHM and damage detection problems. The developed techniques are divided into model-based and data-driven techniques.

Date : Saturday November 30, 2019, at 10H00

Place : salle d'innovation

You are cordially invited ...

Marwa Chaabane, Member ATMS-ENIS