

## IUPUI

# PURDUE SCHOOL OF ENGINEERING & TECHNOLOGY ELECTRICAL & COMPUTER ENGINEERING SEMINAR

### BOOSTING RESEARCH PERFORMANCE WITH HIGH PERFORMANCE COMPUTING

DATE: FRIDAY, MAY 6, 2016 TIME: 10:30AM – 11:30AM ROOM: SL 165 (723 WEST MICHIGAN STREET)

## Nabil Abdennadher, Ph.D.

Professor, Department of Computer Science and Engineering, University of Applied Sciences, Western Switzerland

### ABSTRACT

This talk presents the experience accumulated by the Large Scale Distributed Research Group (lsds.hesge.ch) in the field of porting and deploying compute-intensive e-science applications. The aim of the Large Scale Distributed Research Group is to accelerate e-Science activities and provide assistance to researchers who may benefit from leading edge high performance technology. In this talk, a review of sample use-case applications from different fields, including medicine, engineering, environment, art, and biotechnology will be presented. This review will emphasize the breadth of applications that can potentially benefit from this technology. These applications are then used to showcase the frameworks and platforms that were developed by the group in order to support cost effective development and deployment of high performance solutions to the aforementioned applications.

#### **BIOGRAPHICAL SUMMARY**

Nabil Abdennadher received his Ph.D. from the University of Valenciennes, France. He was an assistant professor at the University of Tunis II from 1992 to 1998 and a research assistant at l'Ecole Polytechnique Fédérale de Lausanne from 1999 to 2000. In 2001, he joined the Department of Computer Science and Engineering at the University of Applied Sciences, Western Switzerland (HES-SO, hepia) as an assistant HES professor. He is currently a full professor at the same university and head of both the inIT Research Institute and the 'Large Scale Distributed Systems research group'. Dr. Abdennadher was a member of the Executive Board of the Swiss National Grid Association from 2008 to 2013. He is also the founder of two companies in Tunisia and Switzerland.