



Seminar



## **Perception, Environment Modeling and Motion Planning: Integration on Humanoid Robots**

**Dr. Alireza Nakhaei**

**Friday, May 7, 2010**

**1:30PM – 2:30PM**

**CBY A605**

### **Abstract:**

This talk will present my research in integrating perception, environment modeling and motion planning on humanoid robots. After a brief review of the environment modeling by the method of occupancy grid, it presents mainly my research work on whole-body motion planning for humanoid robots. It pertains to our recent research work in the scope of a humanoid robotic project with Toyota-Motors Europe.

### **Biography:**

Dr. Alireza Nakhaei completed a Bachelor of Science and a Master degree in Mechanical Engineering before obtaining his Ph.D. in September 2009 from Institut National Polytechnique de Toulouse in Computer Science and Robotics while working at LAAS-CNRS in Toulouse, France, under the supervision of Dr. Jean-Paul Laumond and Dr. Florent Lamiroux. Dr. Nakhaei has acquired a solid experience in kinematic and dynamic modelling of mobile robots as well as on the development of humanoid robots, with a special interest in motion planning. He also cumulated industrial experience in various manufacturing companies. He currently collaborates with Toyota-Motors Europe while pursuing research at LAAS-CNRS on algorithms for Motion Planning for a Humanoid Robot.