

AVVISO DI SEMINARIO

per il Corso di

HIGH PERFORMANCE AND CLOUD COMPUTING

Ingegneria Informatica Magistrale

e per il Corso di Dottorato in

INGEGNERIA INDUSTRIALE E DELL' INFORMAZIONE

Il 10 Maggio 2018, alle ore **11:00** presso l'**Aula Magna** della Scuola, sita in via
Roma n. 29 – Aversa

Dr. Marco Briscolini
HPC Sales Manager
Lenovo Global Technology Italy

terrà un seminario su:

Next Generation High Performance Computing Architecture

The technological enhancement in the segment of microprocessor, network, storage and software, has a significant impact on designing architectures for high performance computing facilities. Europe, NA, China and Japan entered in the last decade in an open competition investing Billion\$ in high performance computing. That is not just a game on achieving the summit of Top500 list but more significantly HPC is an instrument of competitiveness for development of new products or to exploit innovative financial or social mathematical models, as well as enhancement of theoretical and technical basic researchers. Very recently computing facilities achieved more than 50Pflops. The HPC road-map shows the possibility to surpass hundreds of Pflops in 2019 and the first exascale architecture deployed at about 2022. The challenge is to design and deploy a reliable and usable architecture with hundred of thousands of processor cores communicating together in a collaborative effort. Then the designing of innovative algorithms exploiting very large parallelism is crucial for using such computing tremendous capabilities. As a consequence operative systems, compilers, message passing interface, will contribute significantly for offering a reliable eco-system to end-users. At the end hundreds of Pflops usable implies to adopt sophisticated solutions to reduce as better as possible power consumption of very large facilities.

Il Docente
Prof. Beniamino Di Martino