**Ph. D. position**: at Télécom SudParis, research center of Institut Mines-Télécom

**Period**: 09/2013 – 10/2016 (36 months)

**Thesis topic**: the main objective of the thesis is to derive mathematical programming approaches for cloud federation involving compute, storage (caching, memory and persistent storage) and communications resources for distributed “infrastructure and platform as a service” environments that are interconnected via SDN (Software Defined Networks and Networking) principles. To go beyond the current state of the art, the investigations will include multiple providers and tenants and will take into account the dynamic variation of the demand and the application flows that have been overlooked so far. The candidates must send their CV and statement of purpose to Professor Djamal Zeghlache who has been working on resource management algorithms for networks and clouds with an emphasis on cloud networking, convergence and federation challenges.

**Eligibility**: candidates must hold an accredited Master of Science Degree in computer science or electrical engineering or mathematics or operations research. Knowledge on networks and combinatorial optimization are recommended for this topic. Knowledge on clouds and cloud networking or SDN is a plus.

**Application**: please send your CV and letter of motivation to:

Professor Djamal Zeghlache, Head of Wireless networks and Multimedia Services Department,
Télécom SudParis, Evry, France.

**Email address**: djamal.zeghlache@it-sudparis.eu

**Selection process**: candidate selection and interviews will start May 15, 2013 and will close in June 2013. Candidates should make themselves available for an interview if selected.