PhD and Job opportunities
for international ANR project "SIERRA"

This ANR ("Agence Nationale de la Recherche" equivalent to french NSF) project is devoted to Spectral efficient Receivers and Resource Allocation for Cognitive Satellite communications. The main aim is to provide new technology solutions for extending the Quality of Service and opening new areas of applications and services in satellite communications on frequencies already used by terrestrial systems. Technically speaking, the goal is to perform distributed resource allocation maximizing the throughput (or other relevant objective functions) while satisfying the interference temperature limits regarding the primary systems by taking into account nonlinear impairments due to satellite components.

The partners are the following renowned institutes: Telecom ParisTech, France, Eurecom Institute, France, INPT, France, and University of Luxembourg, Luxembourg. The PhD candidates will be affected to one of the partners. However he/she will spend some months at the corresponding abroad partner. He/she will disseminate the results through scientific publications in high impact factor journals and present the results in the internationally well-known conferences and workshops.

- One 3-years PhD position at Telecom ParisTech on the resource allocation taking into account the nonlinear impairment. The successful candidate will be supervised by Prof. Philippe Ciblat (Telecom ParisTech) and Prof. Charly Poulliat (INPT).

- One 3-years PhD position at SnT, University of Luxembourg on the dynamic resource allocation. The successful candidate will be supervised by Prof. Björn Ottersten and Dr. Symeon Chatzinotas.

- One 18-months postdoc position at Eurecom Institute on the distributed resource allocation. The successful candidate will work with Dr. Paul de Kerret.

All the positions are full-time and fixed-term contract. The candidate should possess an MSc degree or equivalent for the PhD position or a PhD for the postdoc position. Further, the position holders should have an excellent knowledge and/or experience in a number of the following topics: Cognitive radio systems and networks, Beamforming and precoding techniques, Radio and network resource management techniques, and have a strong knowledge in Optimization theory (Convex, non-convex optimization). Development skills in MATLAB or C++ are required. Fluent written and verbal communication skills in English are required. French is not required.

Deadline for applications: March 15th, 2018 (Please the applications will be considered as they arrive, therefore, early application is highly encouraged)

Contact: Philippe Ciblat (philippe ciblat@telecom-paristech.fr) for PhD in Paris, Dr Sina Maleki and Dr. Symeon Chatzinotas (sina.maleki@uni.lu, symeon.chatzinotas@uni.lu) for PhD position in Luxembourg, and Dr. Paul de Kerret (paul.dekerret@eurecom.fr) for the postdoc position. In any case, do a CC to the Principal Investigator (Prof. Philippe Ciblat).

Further information: see the project website (http://sierra.wp.imt.fr)