

PhD Studentship

Signal Processing Techniques for 5G Wireless Communications

Communications Systems Group, Centre for Telecommunications Studies (CETUC), Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil

AND

Communications Research Laboratory, TU Ilmenau, Ilmenau, Germany

Applications are invited for a PhD studentship in signal processing techniques for 5G wireless communications. This studentship is funded by the CNPq/CAPES research councils in Brazil. The topic of the project is open in the area of signal processing techniques for 5G wireless communications. Potential topics include:

- Massive MIMO systems
- Millimeter-wave communications
- Distributed antenna systems
- Precoding techniques
- Detection algorithms

Deadline for application: 25th November 2014

Start date: March 2015

The activities will involve the development of system and signal models using linear algebra, simulation tools, practical signal processing algorithms and analytical approaches.

This is an exciting international opportunity for a candidate with (or expecting) an MEng or an MSc with First Class Honours in Electrical and Electronic Engineering or related areas. Amongst the key technical disciplines are an excellent level of mathematics, development of algorithms and design of communication systems. The successful candidate will be based at the PUC-Rio, Rio de Janeiro, Brazil, will visit TU Ilmenau frequently and spend a substantial part of the time there, and is expected to attend international conferences and collaborate extensively with international experts.

The studentship is open to everyone, covers the tuition fees, and gives a stipend of about US\$ 1,000 per month for 4 years subject to an annual increase. Additional funding might be available with industrial projects and requires extra 4-6 hours per week. There is also the possibility of a joint doctoral degree with TU Ilmenau, Germany if desired.

Applicants should send an up to date cv with photo, a one-page personal statement, full contact details (including email addresses) of 2 referees, transcripts and publications to:

- Prof. Rodrigo C de Lamare (<http://delamare.cetuc.puc-rio.br/>) -
Email: delamare@cetuc.puc-rio.br
- Prof. Martin Haardt (<http://www.tu-ilmenau.de/crl>) -
Email: martin.haardt@tu-ilmenau.de