



The Signal Processing group ([www.sigproc.uni-oldenburg.de](http://www.sigproc.uni-oldenburg.de)) at the Department of Medical Physics and Acoustics and the Centre of Excellence Hearing4All, Carl von Ossietzky Universität Oldenburg, Germany, is seeking to fill the position of an

### **Experienced Researcher (Postdoctoral Research Associate)**

in the **Marie Curie Initial Training Network DREAMS** (Dereverberation and Reverberation of Audio, Music and Speech, [www.dreams-itn.eu](http://www.dreams-itn.eu)). This full-time position (39,8 hours/week) is available from **01.06.2014**, for initially **16 months**, with a salary according to the Marie Curie Initial Training Network conditions (50,625-53,350 € / year before taxes). The main part of the research work will be carried out at the University of Oldenburg, Germany (supervisors: Prof. Simon Doclo, Prof. Timo Gerkmann) and will include a 4-month research secondment at Imperial College London, UK (supervisors: Prof. Patrick Naylor, Prof. Mike Brookes).

The DREAMS Initial Training Network started in 2013 and investigates the problem of modeling, controlling, removing and synthesizing acoustic reverberation with the aim of enhancing the quality and intelligibility of audio, music and speech signals. The ITN hosts 12 Early Stage Researchers and 4 Experienced Researchers, each performing an individual research project around one of four themes that reflect the most challenging open problems in the area of (de)reverberation. The research training is organized and supervised by an international consortium of 12 leading institutions from academia and industry.

The title of the envisaged research project is **Perceptual impact and objective measures of (de)reverberation** (WP2-ER). Although relatively good perceptual models exist to predict the effect of reverberation on speech intelligibility in noisy environments, a general framework for the perceptual evaluation of reverberant and dereverberated speech signals is not yet available. Moreover, the available objective measures to evaluate dereverberation (and combined noise reduction and dereverberation) algorithms are not yet able to accurately predict speech intelligibility and quality. The objective of this research project is to develop and validate a general framework for the perceptual evaluation of reverberant and dereverberated speech signals. First, subjective listening experiments to investigate the relationship between the physical and perceptual attributes of reverberation, including other acoustic artefacts, will be designed and executed. Based on these listening experiments and psychoacoustical models, a general perceptual framework will be developed and validated.

We are seeking for candidates with a PhD degree (or at least 4 years of equivalent research experience) in auditory science, physics, electrical engineering or a related discipline, who have an excellent research and publication record in the field of auditory perception, (psycho)acoustics and/or speech and audio processing. A strong interest in interdisciplinary and application-oriented work, familiarity with subjective listening experiments, as well as good English language skills are required. Apart from independently conducting cutting-edge research leading to journal publications, the experienced researcher is expected to cooperate with the early stage researchers in the DREAMS ITN. Please note that candidates are only eligible if they obtained their academic university degree (Master) less than 5 years prior to their recruitment and have lived/worked in Germany for less than 1 year in the 3 years immediately prior to their recruitment.

The Carl von Ossietzky Universität Oldenburg strives to increase the proportion of women in science, so we especially encourage female candidates to apply. Handicapped applicants will be given preference if equally qualified.

Please send your application including a letter of motivation, CV, a list of publications, a copy of the university diplomas and transcripts, and contact information of 2-3 possible references to Carl von Ossietzky Universität Oldenburg, Fakultät VI, Signal Processing Group, Prof. Dr. Simon Doclo, 26111 Oldenburg, Germany, or electronically to [simon.doclo@uni-oldenburg.de](mailto:simon.doclo@uni-oldenburg.de). Application by email is preferred. **The application deadline is 15.05.2014.**