

Job ID: ISF108DOC221

The **Acoustic Research Institute (ARI)** of the Austrian Academy of Sciences is an interdisciplinary research institution of Austria's leading non-university research facility. It undertakes top-level research in auditory cognitive neuroscience, psychoacoustics and experimental audiology, acoustic phonetics, musicology and bioacoustics, physical and computational acoustics, and mathematics and signal processing. The close interaction of the working groups allows innovative research approaches through the synergistic effects of multidisciplinary research. This position will be integrated in the work group "mathematics and signal processing in Acoustics" and will be conducted together with NuHAG. Currently ARI is offering

3 PHD STUDENT POSITIONS (F*M)

(part time, 30h per week)

together with the Numerical Harmonic Analysis Group (NuHAG) of the faculty of mathematics of the University of Vienna.

The positions are assigned to the FWF project "[LoFT - Localized, Fusion and Tensors of Frames](#)". This project will be led by Doz. Dr. Peter Balazs in cooperation with the University of Vienna, Hakim Sabzevari University Iran, University of Missouri, Philipps Universität Marburg and the University of Basel. The candidates will be supervised by Peter Balazs together with the partners of the project (Gröchenig, Ehler, Speckbacher, Casazza, Dahlke, Harbrecht and Arefijamaal). Meetings with the international partners as well as exchange visits are planned. The PhD studies will be done within the Vienna Doctoral School of Mathematics.

The PhD students will be employed most of the time at ARI, but also at NuHaG. Each of the position will focus on one of the sub-topics:

- *Localized frames* (two years at ARI, one year at NuHAG; co-supervisor Gröchenig)
- *Fusion Frames* (2 ½ years at ARI, half a year at NuHAG; co-supervisor Ehler), and
- *Tensors of Frames* (3 years at ARI; co-supervisor Speckbacher)

Job description:

- Participation in the research project
- Communication of scientific results in scientific publications and at scientific meetings
- Sign a doctoral thesis agreement within 12 months.
- No teaching duties, but optionally possible

Requirements and qualifications:

- Master's degree or diploma in a related research field
- Profound knowledge of written and oral English
- Flexibility, ability to work independently as well as in a scientific team
- Experience in frame theory, in particular, in the sub-topics is an advantage
- Preference will be given to applicants that already have related publications

We offer 3 part-time positions (30h/week) with a desired starting date at December 1, 2021. The annual gross salary is EUR 31.326,40 (14 payments a year) according to the salary scheme of the Austrian Science Fund.

Interested candidates are invited to send a CV, copies of relevant certificates (MSc, diploma), names and full contact details of two referees, and a brief statement describing motivations, personal qualifications, and research interests by e-mail to Peter Balazs (peter.balazs@oeaw.ac.at). Applications will be accepted until an adequate candidate has been found. The first round of evaluation will start at November 1, 2021. Informal inquiries and questions can be addressed to Peter Balazs.

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. The OeAW lays special emphasis on increasing the number of women in senior and in academic positions. Given equal qualifications, preference will be given to female applicants.