

**Karin Schnass**

Technikerstraße 13  
6020 Innsbruck  
Austria  
karin.schnass@uibk.ac.at

## PhD opening

Dear prospective PhD-students,

I am looking to fill a 4-year PhD position in the Department of Mathematics at the University of Innsbruck, starting October, 2022 (or as soon thereafter).

The PhD project can be either in our core area of expertise dictionary learning, that is, the learning of representation systems (dictionaries) providing compact (sparse) descriptions for high dimensional data classes or in the area of random properties of Gabor and/or localised frames.

More information can be found on our [research](#) or [publication pages](#).

The university position is initially for 20h per week, which increases to 30h per week once a dissertation agreement is submitted - usually after one year. Until submission it is possible to be employed for an additional 10hrs/week as part of the START Project *Optimisation Principles, Models & Algorithms for Dictionary Learning*. The gross salary for 30h/week is around 2.300EUR/month (14 months per year).

Apart from research the position entails teaching duties of approximately 2hrs per semester and light administration duties. Research language is English but (readiness to acquire) German skills (fast) will be for useful for teaching and every day life.

### Application:

The official application link can be found [here](#), deadline **2.9.22**. Interested candidates with a BSc and MSc degree in mathematics (or a related field), a strong background in linear algebra, probability theory or harmonic analysis as well as experience with Matlab/Python/Julia need to submit: a cv, copies of their university transcripts (BSc and MSc grades) and a short motivation letter including the contact details of 2 referees. You will also need to include a 2 page dissertation proposal, mentioning the preferred project – dictionary learning or (random) Gabor frames – together with a summary of recent results in dictionary learning resp. irregular Gabor frames and random subframes as well as questions you would be interested in, cp. [publication pages](#).

Concrete questions can be mailed to [karin.schnass@uibk.ac.at](mailto:karin.schnass@uibk.ac.at) until **11.8.22**.

I am looking forward to your application!!

Kind regards,

Karin Schnass