

More information on the advertised tenure track junior professorship on Systems Theory and Automatic Control

(please note: the following information is not part of the official job advertisement and is only meant to give informal background information to interested candidates)

a) About the IST:

The Institute for Systems Theory and Automatic Control is part of the Mechanical Engineering Department (to be precise: The Faculty of Design, Production Engineering and Automotive Engineering <https://www.f07.uni-stuttgart.de/en/>) of the University of Stuttgart and is one of four institutes of the Engineering Cybernetics focus areas of the department.

A special feature is the BSc/MSc study program Engineering Cybernetics (<https://www.uni-stuttgart.de/en/study/bachelor-programs/engineering-cybernetics-b.sc./>) in which about 400 students are enrolled at any time.

Currently the institute consists of three permanent professorships, the currently advertised position being one of them. The institute is embedded in a strong automatic control environment that includes sister control groups in the mathematics department (<https://www.imng.uni-stuttgart.de/>) and the aerospace department (<https://www.ifr.uni-stuttgart.de/>), to name just two explicitly. Our goal is to be a leading institute for systems theory and automatic control in Germany and internationally. The official institute language is English.

b) About the Cluster of Excellence "Data-Integrated Simulation Science (SimTech)"

The advertised professorship is full time associated with the Institute for Systems Theory and Automatic Control but will be jointly appointed by the Faculty of Design, Production Engineering and Automotive Engineering and by the Cluster of Excellence "Data-Integrated Simulation Science (SimTech)" <https://www.simtech.uni-stuttgart.de/exc/>. The excellence cluster is a leading interdisciplinary collaborative research center funded by the German National Science Foundation DFG (<https://www.dfg.de/en>). Association with the cluster implies joint research and networking opportunities within the cluster and the possibility to use cluster facilities and participate in the cluster funding.

c) About the Junior Professorship:

All professor positions (including the advertised position) at the institute are independent professorships that share a common infrastructure. The open professorship is a tenure track junior professorship (W1) which is more or less equivalent to assistant professors in the US system. Some information on junior professors can be found at <https://www.research-in-germany.org/en/jobs-and-careers/info-for-postdocs-and-junior-researchers/career-paths/junior-professorship.html>

Tenure track means that the university intends to hire the new professor on a permanent basis, but that after 4 years an intermediate evaluation and after 6 years a final evaluation takes place. If the final evaluation after six years is successful then the professor is elevated to a full professor position (W3) without considering other candidates.

The denominations "W1" and "W3" do refer to the German salary system for professors. W1 being the lowest tier and W3 being the highest tier. A successfully evaluated candidate will immediately jump to W3 without an intermediate time at W2. For especially successful junior professors there is the option for early tenure.

d) Area of Research and Teaching:

The call is formulated very open. Candidates with a theoretical, computational or applied focus will be considered. We are interested in hiring a very strong candidate with high potential. We will do our best to support and nurture this person to become a leader in the field.

e) Teaching Requirements for Junior Professors:

For the first four years the junior professor has the obligation to teach one course (4 hours per week) per semester. For the final two years the teaching obligation goes up to 6 hours per week. The courses taught can more or less be chosen freely but should be aligned with the existing study programs.

f) Starting Package:

The newly appointed professor will negotiate a starting package with the rector of the university.

This will include funding for PhD students and it is realistic to expect funding for at least one PhD student for the six years, plus funding of a further PhD student through SimTech. Besides the normal national, EU and state funding opportunities and funding possibilities by foundations, industry, etc. the University of Stuttgart, SimTech and Cyber Valley have their own programs to support research. It is fair to say that the funding opportunities for high-class research are excellent in Germany.

It is expected that the appointed professor will seek external funding in addition to the funds provided.

Candidates interested in experimental research are invited to contact Frank Allgöwer to learn about existing facilities. Additional experimental setups need to be discussed during the negotiations with the rector.

The starting package will also include some yearly funds to be used freely plus some initial startup funds.

g) Research Environment:

Systems theory and automatic control are considered focus fields of the University of Stuttgart that have a direct link to several of the key strength areas of the university (Stuttgart Research Center Autonomous Systems, Stuttgart Center for Simulation Science, ...).

In addition the University of Stuttgart is part of the Cyber Valley initiative <https://cyber-valley.de/en> where systems and control also play a significant role. An association of the appointed professor with Cyber Valley is planned.

In addition the Stuttgart region features a strong, research intensive industrial environment with many companies of different size interested and active in the systems and control area (Bosch, Daimler, ...).

h) Language Requirements:

The official institute language is English and thus a good working knowledge of English is essential.

No German language knowledge is required at the time of hiring, but a willingness to learn German is expected. Teaching can be done in English. However most mandatory classes at the BSc level are taught in German.

i) Starting Time:

The position is available immediately. The exact starting time for the successful candidate is a matter of negotiation.

j) Any Other Questions?

Please feel free to contact Frank Allgöwer by email (frank.allgower@ist.uni-stuttgart.de) or phone (+49-711-68567733) any time.