

Applications are invited for a fully funded PhD studentship position within the Department of Systems and Control at Jozef Stefan Institute, Slovenia starting in the fall 2018. At Jozef Stefan Institute, you will have thrilling opportunity to apply the latest technologies to solve real-world problems, in particular modelling of dynamic systems.

### **Research area and project description:**

We are looking for qualified and talented enthusiast PhD students who wish to investigate modelling problem of dynamic systems using artificial intelligence/machine learning methods with emphasis on big data, computer-assisted modelling, online learning, deep learning, probabilistic and kernel methods for various domains of application.

The objectives of the proposed research project are to develop methods for system identification based on big data, to improve the existing modelling procedures for better accuracy in the case of sparse data and to make the developed system-identification methods result in models suitable for long-range prediction and model simulation for large-scale systems.

If you wish to shape the future through joining system identification with machine learning methods, come and join us, we can create this vision with your help.

The fully funded PhD position is for 3 and half years (starting Fall 2018) at the Department of Systems and Control at Jozef Stefan Institute which is a stimulating environment to drive your passion for research.

### **Qualifications and specific competences:**

Required:

- A master's degree in electrical engineering, mechanical engineering, aerospace engineering, computer science/engineering, control theory, mechatronics, applied mathematics, physics, or other related disciplines
- Excellent verbal and writing skills in English with very good communication skills
- excellent analytical and problem solving skills
- well-developed programming skills in Matlab and other programming languages

Preferred:

- Experience in system identification or machine learning
- Demonstration of research activities (conference or journal papers)

### **Application:**

To apply for this Ph.D. position, send an email to [jus.kocijan@ijs.si](mailto:jus.kocijan@ijs.si) with “PhD application” as subject, attaching an academic CV, a cover letter, a pdf of your diplomas and transcript of course work and grades, a certificate of proficiency in English, and any other document deemed necessary by the candidate which can enrich the application. The call for applications will remain open until the optimal candidate is found.

**Do you want to study for a PhD at an established research institute?**

The Institut Jozef Stefan is the leading Slovenian research organisation. It is involved in a broad spectrum of basic and applied research in the fields of natural sciences and technology. Its departments specialize in research in physics, chemistry and biochemistry, electronics and information science, nuclear technology, energy utilization and environmental science. The basic goals of the Institute are to provide expert scientific and applied output in the form of processes, products and consultancy, and to produce well-trained young scientists. Learn more at <http://www.ijs.si/en/> and <http://dsc.ijs.si/en/>

Slovenia is the south central European country and a member of European Union that stretches between the Adriatic Sea and the Alps. Ljubljana is a lively industrial, commercial, administrative, and cultural centre with a population of 300,000, 55,000 of which are students.

**Salary range:**

The post carries a competitive gross salary of about 16000 EUR per year and offer possibilities of research related travel. The working and fiscal status of a recipient of a PhD fellowship is that of an institute employee.

**Contacts:**

Applicants seeking further information are invited to contact:  
Professor Juš Kocijan, e-mail: [jus.kocijan@ijs.si](mailto:jus.kocijan@ijs.si), [http://dsc.ijs.si/en/people/jus\\_kocijan/](http://dsc.ijs.si/en/people/jus_kocijan/)