

## **Professor in Applied Mathematical Analysis for Inverse Problems**

DTU Compute at DTU invites applications for an appointment as Professor in Applied Mathematical Analysis conducting research on inverse problems. The professor position is affiliated with the Section for Scientific Computing.

DTU Compute is an internationally unique academic environment spanning the science disciplines mathematics, statistics, and computer science. DTU Compute is also an engineering department covering informatics and communication technologies (ICT) in their broadest sense. Finally, DTU Compute plays a major role in addressing the societal challenges of the digital society where ICT is a part of every industry, service, and human endeavour.

DTU Compute strives to achieve research excellence in its basic science disciplines, to achieve technological leadership in research and innovation, and to address societal challenges in collaboration with partners at DTU and other academic institutions, nationally and internationally, and—equally important—with industry and organizations. DTU Compute interacts with leading centres and strategic partners in order to increase participation in major consortia.

DTU Compute plays a key role in education at all levels of the engineering programmes offered at DTU—both in terms of our scientific disciplines and our didactic innovation.

The aim of the new position is to strengthen the department's teaching and research activities in applied mathematical analysis, functional analysis, and partial differential equations. Focus will be on the mathematical analysis and computational aspects of inverse problems.

These activities are strongly coupled to various projects and collaborations with international partners. For example, the new Professor will play a key role in Villum Investigator project CUQI on inverse problems and uncertainty quantification.

### **Responsibilities and tasks**

At DTU Compute, we value knowledge sharing and cross-functionality. Therefore, you are expected to cooperate and be eager to build relations with colleagues in the department and with other departments of DTU.

You must participate in departmental teaching at all levels, so you should value visionary and meaningful communication. Bachelor courses are taught in Danish, other courses in English. For international candidates, DTU offers Danish language courses with the purpose of enabling you to teach in Danish within the first two-three years.

The successful candidate is expected to take a lead position in teaching at the BSc, MSc, and PhD levels.

### **Qualifications**

You are expected to make a special effort in terms of research and teaching and research management, and—generally speaking—your effort is expected to be in continuation of the following qualification requirements:

- A high level of original scientific production at international level that has contributed to the further development of the subject area in question.
- Documented leadership in research and/or teaching
- Documented and successful teaching experience at different levels within the University's study programmes, including, in particular, at PhD level.

### **Assessment**

In the assessment of the candidates, consideration will be given to:

- Documented experience and quality of teaching and curriculum development
- Research impact and experience, funding track record and research vision
- Societal impact
- Documented innovation activities, including commercialization and collaboration with industry
- International impact and experience

- Leadership and collaboration
- Communication skills

### **We offer**

DTU is a leading technical university globally recognized for the excellence of its research, education, innovation and scientific advice. We offer a rewarding and challenging job in an international environment. We strive for academic excellence in an environment characterized by collegial respect and academic freedom tempered by responsibility.

### **Salary and terms of employment**

The appointment will be based on the collective agreement with the Danish Confederation of Professional Associations. The allowance will be agreed upon with the relevant union.

### **Further information**

Further information may be obtained from Head of Department Per B. Brockhoff, tel.: +45 2044 1711 or Head of Section, Professor Michael Pedersen, tel.: +45 4525 3012.

You can read more about DTU Compute at [www.compute.dtu.dk/english](http://www.compute.dtu.dk/english).

### **Application procedure**

Please submit your online application no later than **XXX 2020 (local time)**. Apply online at [www.career.dtu.dk](http://www.career.dtu.dk).

Applications must be submitted as **one PDF file** containing all materials to be given consideration. To apply, please open the link "Apply online", fill out the online application form, and attach **all your materials in English in one PDF file**. The file must include:

- Application (cover letter) addressed to the President
- CV
- A vision for future research
- Teaching and research statement, with a focus on the "Assessment" bullet points listed above
- Documentation of previous teaching and research, as related to the "Assessment" bullet points listed above
- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. <http://orcid.org>)
- Diploma (MSc/PhD)

Applications and enclosures received after the deadline will not be considered.

All interested candidates irrespective of age, gender, disability, race, religion or ethnic background are encouraged to apply.