Selection based on academic qualifications and interview for the conferment of a fellowship financed by Electrolux Professional SpA, to follow the PhD course in Mathematical Analysis, Modelling, and Applications starting from the academic year 2018/19.

In the framework of the agreement signed with Electrolux Professional SpA, the International School for Advanced Studies announces a selection based on academic qualifications and an interview for the conferment of a fellowship to follow the PhD course in Mathematical Analysis, Modelling, and Applications starting from the academic year 2018/19.

**Title of the project:** Artificial Intelligence Solutions for Performance Enhancement of Professional Food Service Appliances

**Fellowship:** The yearly amount of the fellowships is, at the moment, of €18,043.32 gross (11.41% tax).

**Financing Body:** Electrolux Professional SpA

**Duration of the programme:** 3 years

**Requirements:**

The School welcomes applications from young candidates who are going to complete or soon after completion of their undergraduate studies with a strong interest in research.

To be admitted to the School, candidates must be in possession of one of the following degrees by 31 October, 2018:

- Italian *laurea* or *laurea specialistica/magistrale* in a scientific subject;
- A University degree obtained abroad and considered equivalent to the aforementioned Italian degrees by the governing bodies of the School (i.e. M.Sc.).

**Online application:**

An online application must be filled and sent using the procedure available at the page [http://www.sissa.it/applications/phd/](http://www.sissa.it/applications/phd/) by midnight 22 August 2018 (Italian time).

Candidates should upload the following documents in pdf format:

- curriculum vitae et studiorum;
- a certificate of University examinations taken (with marks);
- a final degree certificate;
- If, at the time of application, candidates should not be yet in possession of a degree certificate, they can submit it at the time of the examination. *European Union candidates can submit a personal declaration instead of the aforementioned certificates.*
- a copy of the diploma thesis (if any).

At the end of the procedure, candidates will have to indicate the names and email addresses of two professors that will receive an email requesting to send a recommendation letter through the same online procedure by midnight 22 August 2018 (Italian time).
A confirmation message will be sent to the candidate when he/she will complete the application process.

The candidate will then have to print out the admission request form, sign it and send it, together with a copy of an ID document (i.e. passport) by email, fax or post to the address on the form itself. The request form must reach SISSA within 8 days from the “online deadline” of each course. Late arrival of the application, for whatever reason, will not be accepted.

Candidates with disabilities certified according to the law n. 104/1992 and subsequent modifications, and those diagnosed with Specific Learning Disorder certified according to the law n. 170/2010 and to the D.M. n. 5669 dated 12/07/2011, can report their needs together with the submission of the admission application, within the deadline set by this announcement.

- **Entrance Exams:**

  After the deadline of the announcement, the Commission, which will be composed of internal and external professors of the School and the scientific referent of Electrolux Professional SpA, will evaluate the documentation produced by the candidates (curriculum vitae and studiorum, letters of recommendation, etc.). Candidates who have obtained a minimum score of 21/30 will be invited to take the interview which will be held on **4 September 2018** starting at 14.00, at SISSA in Via Bonomea 265 - Trieste.

  A contribution towards documented travel expenses with the exclusion of expenses incurred using their own means of transport, of up to a maximum of € 150,00, will be given to all candidates who will participate in the interview.

- **Admission:**

  The admitted candidate will be notified by email and will be asked to be present at the School on 1 October 2018 for the registration.

  **Failure to do so without a valid reason will result in the loss of the place and fellowship awarded.**

  In order to be enrolled and to be awarded the fellowship, admitted candidates must pay a “Regional Tax” of the amount of € 120,00 - € 160,00 per year. Information can be retrieved at [http://www.ardiss.fvg.it/](http://www.ardiss.fvg.it/).

  For information about rights and duties of the doctoral students please consult the Teaching Regulations of the PhD courses of SISSA issued with D.D. 705 of 01.12.2017 [at this page](https://www.sissa.it/en/).

  The International School for Advanced Studies will respect the reserved nature of the information submitted by the candidates. All the data will be used for the purpose of the competition only and for the eventual fellowship, in accordance with the Italian Legislative Decree 196/2003.

Trieste, 6 June 2018

The Director
Prof. Stefano Ruffo
PhD course in Mathematical Analysis, Modelling, and Applications

Project: Sviluppo di algoritmi intelligenti per migliorare le prestazioni e l’affidabilità di sistemi elettro-termo-mechanici complessi inerenti processi di preparazione professionale del cibo e attività correlate.

Research Fields: Mathematical modeling, numerical methods, scientific computing, data assimilation, programming and artificial intelligence solutions in order to improve the performance of equipment for professional catering service.

Qualification required: Italian laurea or laurea specialistica/magistrale or equivalent degree obtained abroad in a scientific subject, preferably in Mathematics, Computer Science, Mathematical Engineering, Industrial Engineering

Amount of the fellowship: € 18,043.32 yearly gross financed by Electrolux Professional SpA

Duration of the programme: 3 years (starting from 1 October 2018)

Deadline for online submission of applications: 22 August 2018

Admission: Academic and scientific qualifications + oral exam

The oral exam will take place at SISSA, Via Bonomea 265 – Trieste on 4 September 2018, starting from 14.00 hrs.

Evaluation of academic and scientific qualifications: 30 points

Access to Oral Exam: minimum mark of 21/30 in the academic and scientific qualifications

Evaluation of Oral Exam: 70 points

Total Evaluation: 100 points

Eligibility: 70 points

Admission to the oral exam and results of all evaluations will be notified by email.