

Recruitment of a research engineer

OPTIMIZATION AND DECISION-MAKING

Establishment: CMA - MINES ParisTech

Location: Sophia-Antipolis, France

The Centre for Applied Mathematics MINES-ParisTech (Ecole Nationale Supérieure des Mines de Paris) is recruiting a research engineer as part of the ParisTech chair.

This is a temporary position on a one-year contract.

Research and teaching activities at the Centre for Applied Mathematics concern Mathematics and Computer Optimization and Decision-making.

JOB DESCRIPTION

Economic stakeholders' growing interest in using a long term planning approach, the issues of climate and energy, along with unavoidable environmental constraints and major uncertainty regarding resources, compel the Centre for Applied Mathematics to reinforce and sustain its "prospective and optimization" activities and developments.

This project involves working closely with:

Academia: partnership with the CIRED (Centre for International Research on the Environment and Development) as part of the ParisTech prospective modeling chair for sustainable development;

Industry: partnerships with EDF, TOTAL, Renault, SCHNEIDER electric, RTE, and GRTgaz, etc.;

Institutions: ADEME, IFP;

and is the focus of national and international recognition, including:

Selection by the Strategic Analysis Council (reporting to the Prime Minister) to work with the Energy Commission;

Representing ParisTech at the United Nations conference on climate change and participation in different COPs since Nairobi;

Involvement in the European projects NEEDS, RES2020, OPTIMATE.

The chosen candidate will work as a research engineer in the following domains: Optimization and Decision-making and Long-term planning. He or she will participate in current projects on the smart grid and smart cities.

Research:

The work involves reinforcing the CMA's presence in the domains of Optimization and Decision-making, which are currently the object of renewed scientific and industrial interest. In an increasingly complex world, traditional optimization techniques can prove insufficient, making it necessary to use customized formalisms and develop specific optimization methods and associated tools. Problems tackled range from optimization in a competitive context – calling for expertise on stochastic modeling and games theory- to robust approaches – putting into play approaches resulting from the monitoring.

The candidate will take part in modeling activities coming under the ParisTech Prospective Modeling Chair for sustainable development: <http://www.modelisation-prospective.org>

Teaching:

The candidate will participate in teaching the Master's course specializing in energy system optimization: <http://www.ose.cma.fr>

Qualifications required:

PhD specializing in optimization or mathematical economics.

In addition to optimization skills, experience of software development, knowledge of energy conversion processes, and an interest in economics and climate issues would be appreciated.

APPLICATIONS

Applications should include:

- a detailed curriculum vitae
- a list of works and publications
- a cover letter
- letters of recommendation by scientific or industrial figures (if possible)

and should reach us by 15 décembre 2011

For the attention of Nadia Maïzi, Director of the Centre,
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