The Royal Meteorological Institute of Belgium (RMI) and the Université catholique de Louvain (UCLouvain) invite applications for a full time position in regional climate predictability at the seasonal-to-decadal timescale. The position consists in a 50% tenure track or tenured position at UCLouvain and a 50% position as first assistant (SW2) at RMI, and implies strong interactions between the two institutions.

Context
The position is open in the framework of the FED-tWIN program, a new federal research program from the Belgian Science Policy Office to promote sustainable cooperation between Federal Scientific Institutions and Belgian universities through the funding of joint research profiles. The general theme is "Modelling and forecasting the climate system from seasonal to decadal timescales over Europe using state-of-the-art models and tools from non-linear sciences" (SEAMLESS).

The typical time scale of operational weather forecasts is a few days, while the length of climate simulations, used in particular for climate projections, ranges from decades to million years. The intermediate time scales, from months to decades, have largely been overlooked. These are, however, time scales over which many societal and economical activities are organized and coordinated. Describing the evolution of the atmosphere and climate on such time scales is an essential instrument for societal activities planning, and international efforts are currently ongoing to develop forecasting capabilities at these intermediate time scales.

The institutions
UCLouvain is a comprehensive university offering, in the context of the present position, the opportunity of cross-disciplinary research and teaching collaborations. The position is attached to the Faculty of Sciences and the Earth and Life Research Institute (ELI) that offer opportunities for diverse and stimulating teaching as well as an environment to carry out ambitious research.

The Royal Meteorological Institute of Belgium (RMI) is a scientific federal institution, engaged in meteorology and climatology, and reporting to the State Secretary in charge of Science Policy. RMI's mission is to provide a reliable 7/24 public service realised by empowered staff and based on research, innovation and continuity. RMI research covers the fields of hydro-meteorology, climatology and geophysics based on validated observations collected through networks. Multidisciplinary tools and methods are implemented in order to tackle problems of current concern in meteorology and climatology.

The Louvain-la-Neuve site of UCLouvain and the Royal Meteorological Institute site in Brussels offer a unique modern living environment inside a naturally preserved neighbourhood. Louvain-la-Neuve is conveniently located to the heart of Europe and very close to Brussels, facilitating the exchanges between the two institutions.

Teaching
The successful candidate will have teaching assignments (in English) in the field of physical climatology, meteorology, atmospheric dynamics and climate change, particularly with regard to climate predictability, regional climate processes and operational applications.
Depending of his or her background, he or she will also contribute to the teaching of physics (mechanics, thermodynamics or electricity) or physical geography at the undergraduate level (in French), as well as to the supervision of student’s work and projects.
Research
The successful candidate will develop and drive a cutting-edge research program in the field of regional climate predictability on seasonal-to-decadal timescales as a basis for the development of climate services at these important time scales, with focus on Europe and Belgium.

Without restriction, the successful candidate’s research may specifically be devoted to (1) the study of the physical mechanisms responsible for the low and high frequency variability of the ocean-atmosphere-soil-cryosphere coupled system, (2) the identification of the sources of climate predictability in Europe and Belgium using various tools (models of various complexities and analysis of observational data), (3) the development of forecasting tools derived from models of the global climate system, and (4) the assessment of the prediction skill.

The research program will be conducted at the international level, in collaboration with the major centres and universities developing such approaches, and at the same time, will lead to the development of climate services in Belgium, for the benefit of the general public, the private sector and public authorities.

Specific Qualifications
The researcher should ideally have expertise in atmospheric and climate modelling, and in advanced tools of nonlinear sciences (dynamical systems, stochastic processes, etc.). Since both fields of expertise are not easy to find in a single scientist, the researcher should have expertise at least in one of them, with keen interest to develop the other one in collaboration with scientists from RMI and UCLouvain. The new expert will have by essence an interdisciplinary profile with a strong taste in learning new approaches and techniques in such a way to build a solid bridge between both institutions.

Practical Information

Application deadline: 10th December 2019

Starting date: 1st September, 2020

Further information:
- Prof. Enrico Vitale, Dean of the Faculty SC, UCLouvain, doyen-sc@uclouvain.be
- Prof. Claude Bragard, President of the Institute ELI, UCLouvain, president-eli@uclouvain.be
- Dr Stéphane Vannitsem, Head of the Dynamical Meteorology and Climatology Unit, RMI, Stephane.Vannitsem@meteo.be

Localization:
Science and Technology Sector
Faculty of sciences
Earth and life institute
Louvain-la-Neuve
AND
Royal Meteorological Institute of Belgium
Avenue Circulaire, 3
1180 Uccle

General conditions
Tasks: the applicant will
- Be responsible for teaching courses at all study levels (i.e. undergraduate and postgraduate), as well as in programs of continuing education;
- Supervise the final diploma research (i.e. theses) of undergraduate and graduate students, as well as PhD theses;
- Be involved in (and/or supervise, promote) research programs;
- Contribute to the international visibility of UCLouvain and of the Royal Meteorological Institute of Belgium through teaching and research excellence;
- Be available to carry out, in the long term, different service activities and take on responsibilities within UCLouvain and its entities, and within the Royal Meteorological Institute;
- Contribute to activities of the University with a societal impact in the fields of the economy, socio-cultural changes or cooperation with developing countries;
- Be involved in the development of operational services delivered by the Royal Meteorological Institute for the benefit of the public;
- Fostering and developing collaborative activities between the UCLouvain and the Royal Meteorological Institute.

Qualifications: the applicant must have

- The candidate will hold a PhD degree obtained at the earliest 12 years prior to the submission date of the job application. The 12-year period is extended by one year for each maternity, parental & adoption leave of the candidate & for each long-term sick leave of the candidate or his/her immediate family.
- A PhD degree in science, applied science or any related discipline with proven PhD or post-doc experience in meteorology, climate science and/or nonlinear sciences;
- A significant scientific record with international publications;
- Either a stay abroad for an extensive period or a substantial experience outside UCLouvain and RMI;
- Experience and aptitude for teaching at university level, demonstrated if possible by formal assessments;
- The capacity to work within a team of teachers and to integrate research findings into teaching;
- Creativity and must be open to teaching innovation and interdisciplinarity;
- The capacities required to undertake high-level academic research: capacity to raise research funds, to supervise projects, to animate and lead a research team;
- Experience in using high performance computers for solving complex problems is an asset
- Team management and communication skills, including if possible fluency in French and English, spoken and written. For UCLouvain, you will be asked to acquire these skills within two years after taking office, in order to be able to communicate and teach in these languages. Knowledge of other languages is an additional asset.

Offer

At UCLouvain, the level of recruitment will be made at the rank of tenure track or tenured position, in connection with your previous academic experience.

At RMI, the recruitment will be made at first assistant level (SW2), and the salary will be fixed based on the past research experience, following the rule of the Belgian legislation. A maximum of 12 years seniority could be granted in connection with your previous experience in the research field.

Our HR policies supports equal opportunities and diversity. Attention is also paid to reconciliation of private life and professional life.

How to apply