AFIR-ERM CALL FOR PAPERS & RESEARCH GRANTS

THE CALL & RESEARCH OBJECTIVES

Innovation enabled by digital technology is rampant and omnipresent. With a growing awareness of its potential in the industry, insurance companies increasingly adopt digital agendas in their business activities, but they are also subject to emerging risks, such as cyber risk. Technological advancement impacts the industry across a broad spectrum and thus requires actuaries to extend their knowledge base in this direction. The **AFIR-ERM Section** of the **International Actuarial Association** has as its primary objective the promotion of actuarial research in enterprise *risk management* and particularly *financial risk fields*, to push forward the boundaries of actuarial knowledge and to promote and facilitate an international exchange of views, advice, research and practical information among actuaries and other experts involved in these fields. The AFIR-ERM Section is thus pleased to announce paper prizes for <u>current unpublished</u> research papers and research grants to fund new original research leading to a research paper on innovations in this field in general and particularly on digital innovation in actuarial science. The research questions and objectives can comprise, but are not limited to the following topics:

- Actuarial data science in enterprise risk management: Models and applications of techniques such as artificial intelligence or machine learning in risk management.
- Cyber and technology risk: Managing exposures, possibilities and pricing of new cyber risk insurance products.
- Sustainability: Approaches for sustainable value creation and finance.
- Longevity risk: Innovations to manage longevity risks.
- Extreme events: Monitoring, modeling, and mitigation to expand risk coverage.
- Model governance: Toolkit of actuarial models is extensive, but which models should be used in what way, e.g., for predictions and constructing risk-return profiles (with a focus, e.g., on the own risk and solvency assessment (ORSA) under Solvency II)
- Asset-Liability Management 2.0: Asset portfolio composition in relation with aggregate risk margins in a scientific and systematic way.
- Innovative product design as an insurer's risk management action.

Note again that the above list is not meant to be exhaustive but represents examples of possible topics that might be of interest in the AFIR-ERM field.

All papers and research projects are expected to either be accompanied by tools or code that allows the techniques discussed to be implemented or include links to open source software and code for this purpose.

SUBMISSION & GUIDELINES

The AFIR-ERM Section of the International Actuarial Association is pleased to award a research paper prize of CAD \$5,000 each to the two best selected research papers and research grants of CAD \$10,000 each for three selected research grant proposals.

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SUBMISSION & GUIDELINES

Qualifying research papers are only original full theoretical or empirical papers that are developed for this research program and have not been published (in whole or in part). Submissions are due by **October 1, 2019** and must be submitted in the English language including (1) a separate cover page containing the paper title, author(s) affiliation, contact information and (2) a full paper excluding the author information. Acceptance of submissions: By **December 1, 2019**, the committee will make a decision on all papers and will contact authors accordingly. Selected papers will be presented at the annual AFIR-ERM Colloquium.

Only full papers based on rigorous analysis and empirical strategies will be accepted for review and consideration. The paper must be original research; the paper cannot be currently under consideration or accepted by any other journal; cannot have been already published, in whole or in part.

RESEARCH GRANTS

Proposal submissions are due by **March 1**, **2019** and must be submitted in English. Authors should submit proposals, including the title, a short description of the topic(s) to be addressed, and the approach that will be taken (e.g. literature search, model, etc.), emphasizing issues that require special consideration. Lead authors have to be members of the AFIR-ERM Section and funded research projects will be presented at the annual AFIR-ERM Colloquium. Details should be given regarding the techniques to be used, collateral material to be consulted, and possible limitations of the analysis. Each proposal should be accompanied by the resumes of the author(s), indicating how their background, education, and experience bear on their qualifications to undertake the project. A list of the authors' publications, along with authors' contact information, should be included with the proposal. Furthermore, a schedule for completion of the research should be provided, identifying key dates or time frames for research completion and report submissions. Acceptance of proposals: By **June 1**, **2019**, the committee will make a decision on all proposals and will contact authors accordingly.

Submissions should be sent via e-mail to the AFIR-ERM Section of the IAA: AFIR.research@actuaries.org

Sincerely,

Michael Sherris. AFIR-ERM Chair



