



UNIVERSITÀ CATTOLICA  
del Sacro Cuore

**Dipartimento di Matematica per le Scienze economiche,  
finanziarie ed attuariali**

Nell'ambito delle iniziative seminariali del Dipartimento, rivolte  
alla ricerca ed alla didattica avanzata,

**martedì 25 febbraio 2025, alle ore 16.45  
presso l'Aula C110 – via Carducci**

si svolgerà il **SEMINARIO**

**“Allocating Capital to Time: Introducing Credit Migration  
for Measuring Time-Related Risks**

**Speaker Michel Dacorogna  
(Prime Re Solutions, Zug, Switzerland)**

In this talk, we explore the challenge of assessing time-related risk. Traditional regulatory frameworks for capital allocation in long-tailed insurance risks do not require insurers to hold solvency capital early in the process. However, this approach may underestimate the risk of a company's credit deterioration before the capital is actually needed, contradicting prudent risk management principles that advocate allocating capital as soon as a risk is recognized. In contrast, many real-world actuarial capital management strategies can often be interpreted as implicitly allocating that capital earlier than demanded, which could be too conservative.

To solve this dilemma, we introduce a framework for quantifying time-dependent risks, incorporating exogenous credit migration risk and analyzing the financial consequences of neglecting it. A key advantage of our approach is that it eliminates the need for Monte Carlo simulations in multistep scenarios, which are computationally impractical.

Using this framework, we evaluate six different capital allocation strategies, accounting for the costs associated with potential insolvency before the settlement of long-term claims. Finally, we outline the practical considerations for implementing this approach in the context of heavy-tailed insurance risks anticipated in the future.

Tutti gli interessati sono invitati a partecipare.