**From Physics to Finance and Risk Management in Times of a Pandemic**

For the last 20-30 years, quantitative finance has been a prime destination for physicists moving away from academic careers and to modeling of an increasingly complex financial system. During the 2008 financial crisis the role of physicists and mathematicians promised to be redefined in risk management: What could physicists do to prevent the next financial crisis? Did they cause the last one?

I will discuss some of the questions of interest to physicists entering a new career in finance and risk management at this time: What are some of the interesting questions coming up in finance in the next few years? How do I get started? What background do I need? Should I do data science? Will an MBA help? Will I have impact?

**René Stock, PhD, MBA**

**Vice-President, Market Risk Measurement, Scotiabank**

René Stock is Vice-President for Market Risk Measurement at the Analytics, AI and Machine Learning Centre of Excellence at Scotiabank. René is a key subject matter expert in emerging trends in market and counterparty credit risk and leads a team of 30 quants to develop and oversee risk measures, models and processes for the bank’s derivative and securities financing transaction portfolios. He represents Scotiabank in discussions with regulators and policy groups on key methodology and risk modelling issues. He was instrumental in leading Scotiabank to become the first Canadian bank using internal models for counterparty credit risk capital. René holds a PhD in Physics in the area of Quantum Computing and Information Processing, and an MBA in Finance from the Rotman School of Management at the University of Toronto.