Biography of Speaker:

Gerry Tsoukalas is an assistant professor at the Wharton School at the University of Pennsylvania, teaching the core MBA class in Business Analytics, as well as graduate and undergraduate-level electives in mathematical modeling for finance.

His research interests lie at the intersection of operations, technology and finance, with a focus on fintech operations. Specific areas of application include how to optimally design and operate crowdfunding and blockchain-based platforms, supply chain finance and portfolio management. His work has appeared in leading academic journals, including *Management Science*, *Operations Research*, and *M&SOM*. He serves on the editorial board of *Management Science*, as an Associate Editor.

Professor Tsoukalas completed his undergraduate studies in France, receiving degrees in Physics from the University of Paris, and Aeronautical Engineering from the Institut Supérieur de l'Aéronautique et de l'Espace-Supaero (2005). He completed his graduated studies in the US, receiving a Masters in Aeronautics & Astronautics from MIT (2007) and a PhD in Economics & Finance from the Management Science & Engineering Department at Stanford University (2009-2013). He was also previously a doctoral scholar at the MIT Operations Research Center (2011-2012).

Professor Tsoukalas has experience working with a variety of firms in the financial services and tech industries. Previously, He was a structured products trader at Morgan Stanley in London (2007-2009). He has also consulted for and advised several startups, proprietary investment firms and hedge funds, including EvA Funds (2010-2011), and Weiss Asset Management (2012-2013), and has held stints in several international banks, including Barclays Capital (2006) and Societe Generale (2005).

The Fields Institute for Research in Mathematical Science- Seminar Series:

This seminar series seeks to assemble research scientists (mathematicians, computer scientists, economists) together with industry (for example, finance, health, government, and law) to discuss the current breakthroughs and research challenges in areas that underpin blockchain technology. An important aspect of this workshop (and the reason for being held at Fields) is to shine a brighter light on the role that mathematics currently plays, and it will continue to play, in the foundations of this area. Equally important is to focus attention on blockchain (as opposed to just cryptocurrency) and its fundamental underpinning (rather than applications by enthusiasts). The major objective of this seminar is to disseminate the latest results and state of the art mathematical methods from researchers to academics, students, and especially to the industry. Another key objective is to uncover and expose some of the more theoretical aspects of blockchain technology and expose open questions of fundamental importance for the viability, applicability and continued relevance of the ecosystem.