



URPP Financial Market Regulation



60th Forum Financial Market Regulation of 24 September 2021

Committee-based Blockchains as Games Between Opportunistic Players and Adversaries

The paper by Bruno Biais et al. offers a game-theoretic study of consensus in a committee-based blockchain. Proposers send blocks to other nodes, who can check validity and vote for blocks. Blocks with a majority of votes are accepted. Opportunistic players, who maximise expected rewards, interact with adversaries, who seek to disrupt consensus and propose invalid blocks. Free riding implies the prescribed protocol is not an equilibrium and that there exist equilibria without consensus, even when adversaries are few. There also exists an equilibrium achieving consensus, in which valid blocks are committed. The authors propose a modification of the prescribed protocol implementing this equilibrium.

Agenda

- 12:15 p.m. [Welcome](#)
Prof. Dr. Michel Habib
- 12:20 p.m. [Presentation](#)
Prof. Bruno Biais (HEC Paris)
- 01:30 p.m. [End of the event](#)

This seminar is held jointly with the Department of Banking & Finance (UZH).

- Date: Friday, 24 September 2021
12:15 - 01:30 p.m.
- Venue: University of Zurich, Rämistrasse 71, 8001 Zürich (KOL-F-104)
- Fee: Attendance is free of charge.
- Language: The talk will be held in English.
- Registration: Please send an e-mail with your contact details to forumfinreg@rwi.uzh.ch.
- Note: Prior registration and a valid COVID-certificate is required for the seminar.
- Closing date: Thursday, 23 September 2021