1163-91-1048 **Beatrice Acciaio\*** (`beatrice.acciaio@math.ethz.ch`), ETH Zurich, Raemistrasse 101, HG G 54.3, 8092 Zurich, Switzerland. *PQ-GAN: a market generation model consistent with observed spot prices and derivative prices.*

In this talk I will present a model for market generation that is consistent with both the observed spot prices and the market prices of derivatives. The structure used to learn the evolution of asset prices is that of a conditional GAN for time series generation (such as conditional COT-GAN and conditional Sig-Wasserstein GAN), while derivative prices are used to learn the change of measure from the real-world one (P) to the pricing one (Q). The latter can be done in two different ways: either within the same GAN structure, or in a separate structure via supervised learning. (Received September 14, 2020)