

1154-60-90

Michael Roberts* (`michael.roberts.1@ndus.edu`). *Hypothesis Testing of Lévy Processes from Two Streams of Data.*

In this presentation, we present the testing of four hypotheses on two streams of observations that are driven by Lévy processes. This is applicable for sequential decision making on the state of two-sensor systems. In one case, each sensor receives or does not receive a signal obstructed by noise. In another, each sensor receives data driven by Lévy processes with large or small jumps. In either case, these give rise to four possibilities. Infinitesimal generators are presented and analyzed. Bounds for infinitesimal generators in terms of *super-solutions* and *sub-solutions* are computed. (Received August 01, 2019)