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**Ibrahim Abdelrazeq\*** (iabdelrazeq@gmail.com) and **Gail Ivanoff**, Ottawa, and **Rafal Kulik**. *Goodness of Fit Test: Recovered noise for CAR(1) Processes*.

When an Ornstein-Uhlenbeck (or CAR(1)) process is observed at discrete times  $0, h, 2h, \dots, [T/h]h$ , the unobserved driving process (noise) can be approximated from the observed process. Abdelrazeq, Ivanoff and Kulik (2014) have used the approximated increments of the driving process to test the assumption that the process is Lévy-driven. If it can be concluded that the driving process is Lévy, the empirical process of the approximated increments can then be used to carry out more precise tests of goodness-of-fit. For example, one can test whether the driving process can be modeled as a Brownian motion or a gamma process. (Received September 01, 2014)