1093-60-72 **Ioannis Karatzas** (ik@math.columbia.edu), 2990 Broadway, New York, NY 10027, and **Qinghua Li*** (ms.qinghuali@gmail.com), Unter den Linden 6, 10099 Berlin, Germany. *Impulse Control of a Diffusion with a Change Point.*

This paper solves a Bayes sequential impulse control problem for a diffusion, whose drift has an unobservable parameter with a change point. The partially-observed problem is reformulated into one with full observations, via a change of probability measure which removes the drift. The value function of the control problem is characterized as the unique viscosity solution to a non-stationary variational inequality. The optimal impulse controls can be expressed in terms of the solutions and the current values of a Markov process adapted to the observation filtration. We shall illustrate the application of our results to algorithmic trading in a geometric Brownian motion stock price model with drift uncertainty. (Received July 28, 2013)