2015학년도 1학기

수학전공 Colloquium

제 목	Mathematical model for volatility flocking with a regime switching mechanism in a stock market
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초 록	We present a methematical model for volatility flocking in a stock market. Our proposed model consists of geometric Browinan motions with time-varing volatilities coupled through the Cucker-Smale flocking and regime switching mechanisms. For the all-to-all interactions where all asstets' volatilities are coupled with each other with a constant interaction weight, we show that the common volatility emerges asymptotically, and discuss its financial applications. We also provide several numerical simulations and compare them with analytical results.
일 시	3월 26일 목요일 오후 5시
장 소	5동102