April Joke Contest
426 Spring 2013

Which situation is worse?
A fly in your room, or an ant in your room?
An ant in your room is worse.
According to Brownian motion theorem, once the fly flies away from
the window, it will never come back, but the ant will visit your room
infinitely often.

(A fly does 3D Brownian motion, while an ant does 2D Brownian
motion.)

Q: Why did the martingale get pulled over for running a red light?
A: It thought there was Optional Stopping.

Consider the following pure death process:
There are 40 students in our probability class at time t=0.
Students drop the class at rate $\mu_i=i\mu$, with $\mu=20$.
How many students are in our class now?