

**The zigzagging ball in Blind Pollywog Lake
(A Brownian motion allegory © 10/04/17)**

The following tale allegorically alludes to the theory of the physics behind Brownian particle motion, which suggests that the erratic particle movement segments are caused by collisions with constantly moving water molecules. Ignored in this theory is that a Brownian particle is one trillion times the mass of a water molecule. At least two Nobel prize recipients have used the current interpretation in their Nobel Prize reasoning.

Key words: Brownian motion, collisions, kinetic theory, molecules, waves

**The tale of the zigzagging ball in Blind Pollywog Lake ©
(A Brownian motion allegory, 10/04/17)**

Once upon a time there was a very big and very deep lake surrounded by swampy ground, which was infested with blind frogs. The lake was teeming with blind pollywogs that swam wildly and rapidly, bumping into each other and bouncing off anything in their paths.

Suspended in deep water was a big, hard perfectly round and smooth ball that had the same specific weight as the water. Yes, the ball was big, very, very big. Although it was suspended in the water it was so heavy because of its size. It was so heavy that it wasn't just a thousand times the weight of a pollywog. It wasn't even a million, or a billion times the weight of a pollywog. It was a TRILLION times the weight of a pollywog.

A young scientist was watching the ball using his underwater viewing scope. The ball was zigzagging back and forth in the water in random directions and random lengths of linear paths, like the up-and-down and side-to-side motions of beach ball being battered by turbulent waves in a fast-flowing stream. He imagined that the big ball was being buffeted by some unseen and as yet unrecognized varying wave force.

The young scientist knew the lake was teeming with blind pollywogs, but considered them irrelevant to the ball's motion. As a child, he had gained fame by voicing an observation about the style and nature of the Emperor's attire during his fabled ride on horseback along the boulevard lined by his adoring subjects.