BROWNIAN MOTION IN CELLS

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ABSTRACT

In this lab, we investigate Einstein's prediction

1. INTRODUCTION

Jean Perrin's experiment particle tracking script Then we observe an onion cell under the microscope to observe intracellular transport. We use the —– compare with the random walk Brownian motion.

2. THEORY

We adjust our condenser irises and depth of field to achieve Kohler Illumination to control the amount of light and the incident angle that the light shines on the sample. This setup ensures that the image of the light source is not superposed onto the actual image of the specimen and provides uniform illumination and heating to the sample.

3. APPARATUS AND PROCEDURE

In this experiment we use an inverted compound microscope that is connected to a CCD camera where the image processing is done by a given particle tracking script.

1. To calibrate the microscopeo —-, we use solution of known size (10μm) to compute how many pixels it looks like on our computer display, to get to the pixel-to-meters ratio used in the image-processing script.
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2.

4. ANALYSIS

5. CONCLUSION

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