

# Investigation on the theory of the Brownian Motion

A short overview

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Albert Einstein, Ph.D.

Swiss Federal Institute of Technology in Zurich

# Introduction

## Goal of this study

We aim at building a new theory for **random movement** of particles

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- ▶ Bla bla
- ▶ Bla bla

because **bla bla**.

# Contents

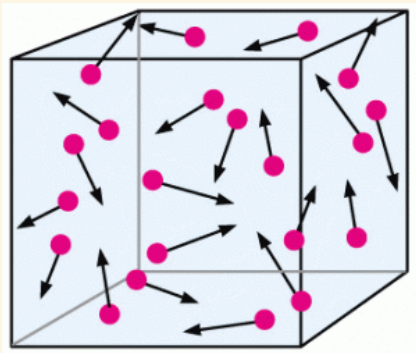
1. On the movement of small particles in a stationary liquid
  - a. System description
  - b. Movement equations
  - c. New framework for movement description
  
2. On the theory of Brownian Motion
  - a. Definitions
  - b. Main result
  - c. Consequences and perspectives

Part 1.

# On the movement of small particles in a stationary liquid

# System description

Particles in a stationary liquid



System representation

- ▶ Elementary particles
- ▶ Thermal agitation
- ▶ Random collisions

Part 2.

# On the theory of Brownian Motion

# Einstein's equations

## Particles in a stationary liquid

### Main result

For particles in a stationary liquid, we have:

$$\langle (\Delta x)^2 \rangle = \frac{RT}{N} \frac{1}{3\pi\mu a} \tau$$

# Some interesting perspectives

Few insights

I think that

- ▶ Bla bla bla
- ▶ Bla bla bla
- ▶ Bla bla bla
- ▶ Bla bla bla

has to be further examined...