



P 2.5.1

Brownian motion of molecules

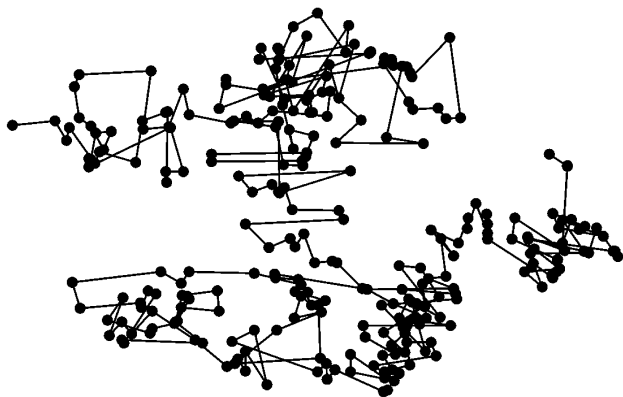
P 2.5.1.1 Brownian motion of smoke particles

Brownian motion of smoke particles (P 2.5.1.1)

Cat. No.	Description	P 2.5.1.1
662 078	Microscope MIC 805	1
372 51	Smoke chamber	1
450 60	Lamp housing	1
450 51	Lamp, 6 V/30 W	1
460 20	Aspherical condensor	1
521 210	Transformer, 6 V AC, 12 V AC/ 30 W	1
300 02	Stand base, V-shape, 20 cm	1

A particle which is suspended in a gas constantly executes a motion which changes in its speed and in all directions. *J. Perrin* first explained this molecular motion, discovered by *R. Brown*, which is caused by bombardment of the particles with the gas molecules. The smaller the particle is, the more noticeably it moves. The motion consists of a translational component and a rotation, which also constantly changes.

In this experiment, the motion of smoke particles in the air is observed using a microscope.



Schematic diagram of Brownian motion of molecules