Special Issue on Kinetic Theory

Call for Papers

Kinetic Theory explains macroscopic properties of gases, such as pressure, temperature, viscosity, thermal conductivity, and volume, by considering their molecular composition and motion. The theory posits that gas pressure is due to the impacts, on the walls of a container, of molecules or atoms moving at different velocities. While the particles making up a gas are too small to be visible, the jittering motion of pollen grains or dust particles which can be seen under a microscope, known as Brownian motion, results directly from collisions between the particles and gas molecules. As pointed out by Albert Einstein in 1905, this experimental evidence for kinetic theory is generally seen as having confirmed the existence of atoms and molecules. The kinetic theory of gases deals not only with gases in thermodynamic equilibrium, but also very importantly with gases not in thermodynamic equilibrium. As one of most crucial issues in the field of science, **kinetic theory** is of great attractions to researchers.

In this special issue, we intend to invite front-line researchers and authors to submit original researches and review articles on exploring **kinetic theory**. Potential topics include, but are not limited to:

- Boltzmann equation
- Collision theory
- Gas laws
- Maxwell–Boltzmann distribution
- Kinetic energy
- Irreversible thermodynamics
- Kinetic theory of dilute monatomic gases
- The kinetic theory of dense polyatomic fluids
- Kinetic theories of quantum gases and gases with internal states

Authors should read over the journal's Authors' Guidelines carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's Paper Submission System.

Please kindly notice that the "**Special Issue**" under your manuscript title is supposed to be specified and the research field "**Special Issue - *Kinetic Theory***" should be chosen during your submission.

According to the following timetable:

Submission Deadline	August 19th, 2014
Publication Date	October 2014

Guest Editor:

For further questions or inquiries
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