

Mathematics: Fundamentals and Applications

Objectives

This three-day (July 16 – 18) mathematics symposium in UKC 2009 aims to bring together Korean and Korean-American research mathematicians and their foreign colleagues in Korea and throughout the United States. All mathematicians are encouraged to participate to explore all areas of mathematics and the current frontiers of science and engineering. The recent developments in mathematical science tell us the importance of interactive collaboration among all mathematicians and scientists. New opportunities for mathematicians are present in many exciting new frontiers in various science, including nanoscience, genomics, biomedical research, quantum computation, the computers and Internet to name a few. This symposium plans to bring many distinguished mathematicians who work in the frontier of science and engineering, and create a venue for interaction between various directions of research in mathematics.

Scope

This symposium will cover all research areas in mathematics. Five or six sessions are proposed as follows:

Topics

- 1) Fundamental problems in classical subjects
- 2) Applied problems in classical subjects
- 3) Problems arising from physics and quantum computation
- 4) Problems in biomedical and genomics
- 5) Problems arising from information technology
- 6) Problems arising from ecology and environmental science

Symposium Chair and Co-Chairs

- **Sung-Yell Song**
Iowa State University
- **Eungchun Cho**
Kentucky State University
- **Hyungju Park**
KIAS
- **Sang-Gu Lee**
Sungkyunkwan University

Session Chair and Co-Chairs: TBA

Special Publications

Selected papers among the papers presented in the symposium will be published either in the *Journal of Korean Mathematics Society* or in the *Journal of Applied Mathematics and Computing* published by Springer.