The International Mathematical Union (IMU)

and

The Deutsche Mathematiker-Vereinigung (DMV)

jointly award the

Carl Friedrich Gauss Prize for Applications of Mathematics

to

Professor Dr. Kiyoshi Itô

for laying the foundations of the Theory of Stochastic Differential Equations and Stochastic Analysis.
Itô's work has emerged as one of the major mathematical innovations of the 20th century and has found a wide range of applications outside of mathematics. Itô calculus has become a key tool in areas such as engineering (e.g., filtering, stability, and control in the presence of noise), physics (e.g., turbulence and conformal field theory), and biology (e.g., population dynamics). It is at present of particular importance in economics and finance with option pricing as a prime example.

Madrid, August 22, 2006

Sir John Ball
President of IMU

Günter M. Ziegler
President of DMV