

## **Coin-tossing in Algorithmics**

Prof. Dr. Hsien-Kuei Hwang (Academia Sinica, Taipei)

Coin-tossing is one of the simplest ways of resolving a conflict, deciding between two alternatives, and generating random phenomena. It has been widely adopted in many daily-life situations and scientific disciplines. In this talk, I will present a few research themes connected to the use of coin-tossing in analysis of algorithms, taken from my research: these include random permutations, data structures, evolutionary algorithms and leader selection. The main focus will be on the stochastic behaviors and the methods of analysis.