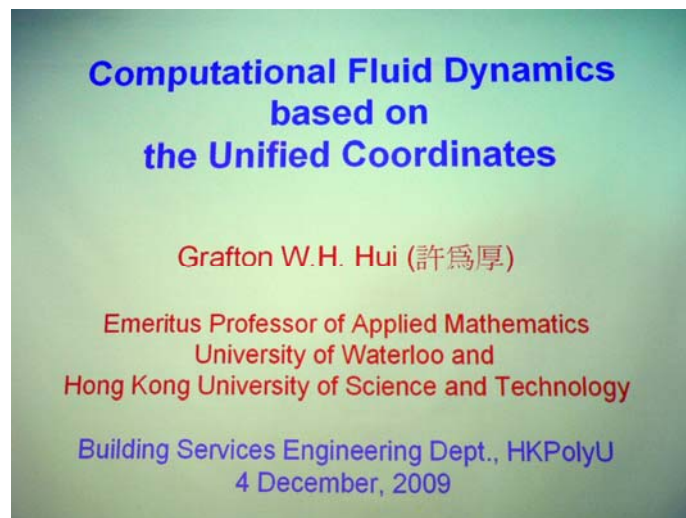


BSE Public CPD Lecture – Computational Fluid Dynamics based on the Unified Coordinates on 4 December 2009

Organized by the Department of Building Services Engineering, a public CPD lecture delivered by Professor W.H. Hui on *Computational Fluid Dynamics based on the Unified Coordinates* was held on 4 December 2009 (Friday). Over 90 participants attended this public CPD Lecture.



[Powerpoint file of the CPD lecture](#)

Professor W.H. Hui is a Professor Emeritus of the University of Waterloo of Canada and the Hong Kong University of Science and Technology. His main research interests include computational fluid dynamics, high speed aerodynamic stability theory, nonlinear water wave theory and similarity solutions of partial differential equations.



Introducing Professor W.H. Hui

Computational Fluid Dynamics (CFD) uses large scale numerical computation to solve problems of fluid flow. Traditionally, it uses either the Eulerian or the Lagrangian coordinate system. These two systems are numerically non-equivalent, but each has its advantages as well as drawbacks.

In the lecture, Professor Hui explained that a unified coordinate system (UC) has recently been developed which combines the advantages of both Eulerian and Lagrangian systems, while avoiding their drawbacks. Finally, a systematic discussion on CFD using the unified coordinates was given. Many examples were also given to demonstrate the properties of the UC.



CPD public lecture by Professor Hui