

Wael M. ELLEITHY

Education

- ◆ 1995 – 2000, Ph.D., Civil Engineering (Structural), KFUPM
- ◆ 1993 – 1995, M.Sc., Civil Engineering (Structural), KFUPM
- ◆ 1985 – 1990, B.Sc., Civil Engineering, Alexandria University

Work experience

- ◆ (2004 – present) **assistant Professor**, Higher Institute of Civil and Architectural Engineering, Egypt
- ◆ (2001 – 2003) **visiting researcher**, Faculty of Mechanical Systems Engineering, Shinshu University, Japan
- ◆ (2000 – 2001) **research fellow**, Delft University of Technology, Netherlands
- ◆ (1995 – 2000) **lecturer**, Civil Engineering Department, KFUPM, Saudi Arabia

Current research interests

- ◆ Computational mechanics (FEM and BEM)
- ◆ Coupling the FEM and BEM with applications
 - ◆ practical applications of FEM-BEM coupling and BEM-BEM coupling
(3-D boundary value problems arising from mechanical applications)
 - ◆ develop efficient FEM-BEM coupling and BEM-BEM coupling algorithms
 - ◆ Domain decomposition/interface relaxation
 - ◆ Convergence/optimal convergence
- ◆ Radial basis functions and Meshfree Methods
 - ◆ Contributing to further advancements in Meshfree methods
- ◆ Domain Decomposition methods

Possible benefits & collaborations

- ◆ Joint research and collaborative efforts
 - ◆ explore applications of FEM-BEM and BEM-BEM
 - ◆ investigate the convergence / optimal convergence of the DD/IR FEM-BEM and BEM-BEM
- ◆ Strengthening the scientific network with the distinguished scientists

DD/IR FEM-BEM coupling and BEM-BEM coupling methods
(tomorrow 14.30-15.00, miniworkshop "Domain Decomposition Methods")

Selected publications

- ◆ Elleithy, Tanaka and Guzik, "Interface Relaxation FEM-BEM Coupling Method for Elasto-Plastic Analysis," *Eng. Anal. Bound. Elem.*, 2004.
- ◆ Elleithy, and Tanaka, "Interface Relaxation Algorithms for BEM-BEM Coupling and FEM-BEM Coupling," *Comp. Meth. Appl. Mech. Eng.*, 2003.
- ◆ El-Gebeily, Elleithy and Al-Gahtani, "Convergence of the Domain Decomposition Finite Element-Boundary Element Coupling Methods," *Comp. Meth. Appl. Mech. Eng.*, 2002.