Department of Ocean and Resources Engineering

Seminar

On Benchmark Problems of Linear 3-D Hydroelasticity of Floating Structures based on the Wigley Hull

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Abstract

In recent times, the rapid development of new and more sophisticated computer codes for linear three-dimensional hydroelasticity has prompted the design of benchmark problems for various floating structures. The following research is the development of such a benchmark problem with a hull based on the Wigley-Hull model. The presentation will discuss the benchmark design, the finite element shell structural model, the hydrodynamic fluid model, and the hydroelastic response. Developers can use the results of this benchmark problem to test their codes, and users can use them to compare computer codes.