A FINITE ELEMENT METHOD FOR VERY LARGE FLOATING STRUCTURES

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ABSTRACT. In this presentation we develop a finite element method applied in Very Large Floating Structures (VLFS). The VLFS are very important topics in engineering structures in the last time [1], with applications in the floating airports, bridges, breakwater, storage facilities, energy plants, emergency bases, mobile offshore structures, habitation, etc. We present the setting of the problem, in the mathematical context with the physical and mechanicals equations and the setting of the problem in the variational sense. We present preliminaries results with error estimates for a first stage in the analysis of the problem. In continuous and discrete context. In the discrete problem we use DL3 elements, that are well known in the Finite element Method for plates [2].

REFERENCES

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