Title: comparative study of induced hydrodynamic pressure during the seismic in the water tank.

Abstract: The presented paper is focused on the evaluation of different approaches to Fluid-Structure Interaction coupling simulation in Ls-Dyna, finite element analysis code. The investigation has been made on the interaction coupling problem between structures and water in a rectangular pool-like during ground motion. The FEM calculation results are camped with analytical formulas by taking into account different methods in Ls-Dyna. In the conclusion the advantages, drawback of corresponding adopted approaches are discussed.