Trapped Waves and Collisions

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Abstract. The aim of this talk is to discuss trapped waves solutions for the full Euler equations due to a localized pressure distribution along the free surface. We consider the case where the Froude number is greater than 1 and study collisions of trapped waves in a low pressure region with solitons. The collisions present rich features, such as destruction of the trapped area, switch of the wave which stays trapped and appearance of a wave that looks like a blocked wave. This is an ongoing work in collaboration with Prof. Marcelo V. Flamarion (UFRPE).