## Surface waves generation by immersed granular avalanches

<u>Lhassan Amarsid</u><sup>1</sup>, Carole Delenne<sup>1</sup>, Jean-Yves Delenne<sup>1</sup>, Vincent Guino<sup>1</sup>, Franck Radjai<sup>1</sup> <sup>1</sup>Laboratoire de mécanique et génie civil (LMGC)

We present a coupled DEM/LBM model for the investigation of surface waves generated by immersed granular avalanches. The evolution of the free surface is modeled by the mass tracking method. We investigate the evolution of surface waves and the influence of the initial configuration (water depth, height of granular column) on their amplitude.

