Chimera grid simulations of falling spheres THOMAS HAUSER, DANIEL SCHAUERHAMER, Utah State University — Many applications involve modeling a system with moving objects larger than the grid, such as air pollution, combustion systems, accident simulations, chemical and agricultural processes. The chimera grid approach is an efficient approach to solve such problems. Simulations of one sphere falling under the influence of gravity and suction through an orifice will be presented. Additionally, we will demonstrate collisions between two moving spheres. In this simulation the setup is the same as in the one sphere case, but two spheres are placed side by side. Both are released to be acted upon by gravity, the suction, and each other.

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