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**Numerical Simulation of Parachutist Generated Turbulence on Parachute Inflation** XIAOLEI CHEN, XIAOLIN LI, Stony Brook University — Using the front tracking computational platform, we couple parachutists as rigid bodies with the spring-mass model for the parachute system. The rigid body generates turbulent flow which affect the parachute inflation and stability. In this talk, we will present our numerical method to solve the complex system and study the effect of the turbulence at the wake of the parachutist on the canopy opening and parachute descent. Several different turbulence models are used and compared with experiments.

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