Huanyao Wen\* (mahywen@scut.edu.cn), Block 4, 381 Wushan, Tianhe District, Guangzhou, Guangdong 510641, Peoples Rep of China. Global existence of weak solution to a two-fluid model without the equivalence condition.

In this talk, I will introduce our very recent work on the global existence of weak solutions to a two-fluid model in three dimensions. The main ingredient is that the solution space is large enough such that the case of transition to single phase is allowed, and that the initial data can be large. (Received September 21, 2018)