1145-03-2389   **C Chang***, 555 Broadway, Dobbs Ferry, NY 10522, and **S Gao**. *Relative complexities of various homeomorphic equivalent relations on closed subsets of* $[0,1]^n$. Preliminary report.

We show that the homeomorphic equivalent relation on the closed subsets of $[0,1]^n$, for $n \geq 2$, does not admit classification by countable structures. In particular, we show by construction that a turbulence action is Borel reducible to the homeomorphic relation on the closed subsets of $[0,1]^2$. (Received September 25, 2018)