Nestor D Guillen* (nguillen@math.umass.edu), Amherst, MA. Coupling Levy measures and comparison principles for viscosity solutions.

We prove a new comparison result for viscosity solutions of integro-differential equations. The operators to which the method applies include but are not limited to those of Levy-Ito type. The main idea is using an optimal transport plan between Levy measures, the resulting coupling them being used in a doubling of variables argument. (Received February 18, 2018)