Alexandru D. Ionescu* (aionescu@math.princeton.edu), Dept. of Mathematics, Fine Hall, Washington Rd., Princeton, NJ 08540. On the existence of global solutions of certain fluid models in low dimensions.

I will discuss some recent work (joint with Y. Deng, F. Pusateri, and B. Pausader) on global existence of smooth solutions of certain water wave models and plasma models in 2 and 3 dimensions. (Received January 17, 2015)