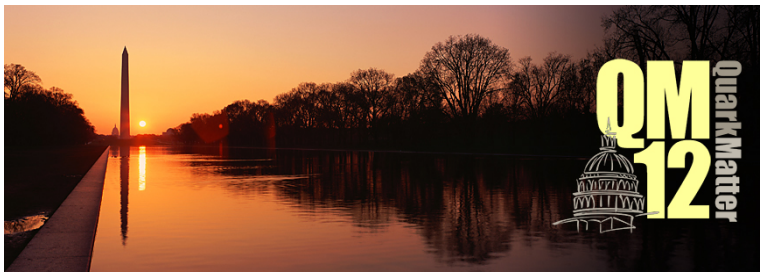

Contribution ID: **97** Type: **Poster**

Propagating fluctuations in fluid dynamic fields

Thursday, 16 August 2012 16:00 (2 hours)

We formulate the propagation of fluid dynamic fields as a propagation of small perturbations around smooth average fluid fields. Fluid dynamic simulations of smooth average initial conditions are then shown to be sufficient to map out the large space of fluid dynamic event histories resulting from arbitrary small fluctuations around these smooth initial conditions. We argue that this provides an efficient way for organizing event-by-event fluid dynamic simulations of heavy ion collisions, and we present details and applications of the approach.

Based on: Stefan Florchinger and U.A. Wiedemann, work in preparation
and JHEP 1111 (2011) 100

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