

Abstract for an Invited Paper  
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**Flow at the LHC from event-by-event viscous hydrodynamics**

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I review recent developments in describing anisotropic flow at the LHC with a relativistic 3+1 dimensional viscous event-by-event hydrodynamic simulation. I present results for elliptic and triangular flow and the comparison to first experimental data. Furthermore, I discuss the potential of the systematic study of higher harmonics and directed flow to pin down the shear viscosity to entropy density ratio of the created quark gluon plasma and the details of the initial state.