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INVITED SPEAKER: Simulating the formation of the first galaxies and black holes in the Universe

Thursday, 14 July 2016 10:50 (20 minutes)

Abstract content
   (Max 300 words)
Formatting &
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I will discuss recent progress in cosmological hydrodynamic simulations of galaxy formation at unprecedented volumes and resolution. I will focus on predictions for the first quasars and their host galaxies and their contribution to reionization from the BlueTides simulation. BlueTides is a uniquely large volume and high resolution simulation of the high redshift universe: with 0.7 trillion particles in a volume half a gigaparsec on a side. This is the first simulation large enough to resolve the relevant scales relevant to the formation of the first large galaxies and quasars. These massive objects at high redshifts will be investigated with the next generation telescopes (Euclid, JWST and WFIRST).

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