

Abstract Submitted
for the PSF09 Meeting of
The American Physical Society

Photoproduction of ϕ -mesons in 200-GeV Au-Au collisions at RHIC OLAMIDE OSINKOLU, Creighton University, STAR COLLABORATION
— In ultra-peripheral collisions the heavy ions pass by each other at large impact parameters and do not interact through the strong interaction. The long-range electromagnetic interaction has a large cross section for the photoproduction of vector mesons. Relativistic ultraperipheral collisions are modeled with the Starlight Monte Carlo. Based on this Monte Carlo, I will discuss the expected signal from the $\phi \rightarrow K^+K^-$ and $\phi \rightarrow K_S K_L$ decay channels in the Au- Au data obtained from the Solenoidal Tracker(*STAR*) at RHIC. A preliminary analysis of the 2007 200GeV Au-Au dataset will also be presented.

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Date submitted: 15 Oct 2009

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