

Title: Poster Advertisement Session 2

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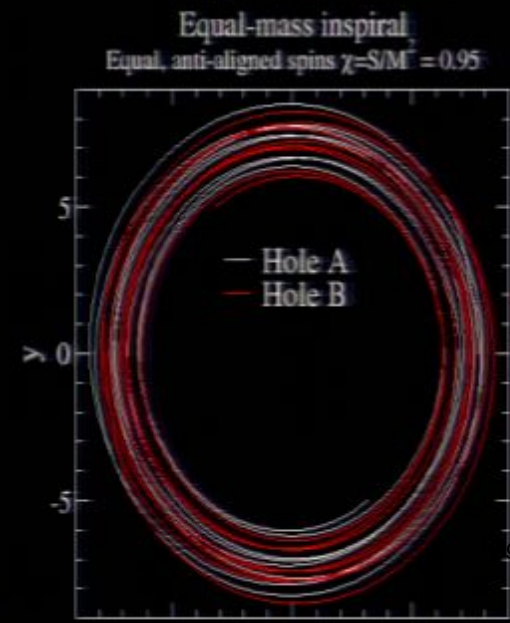
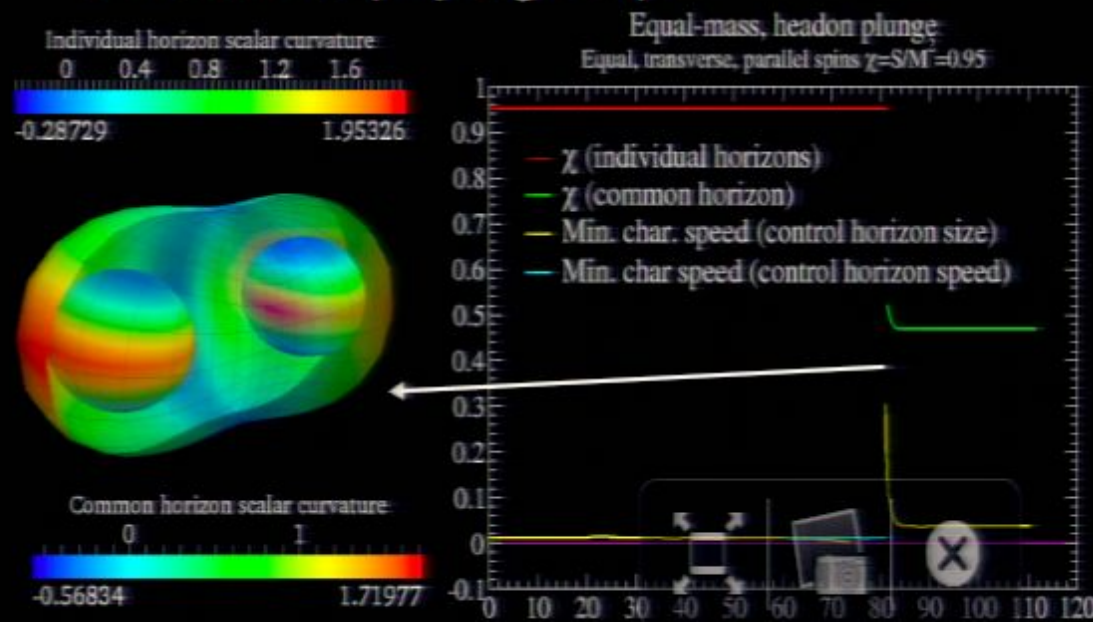
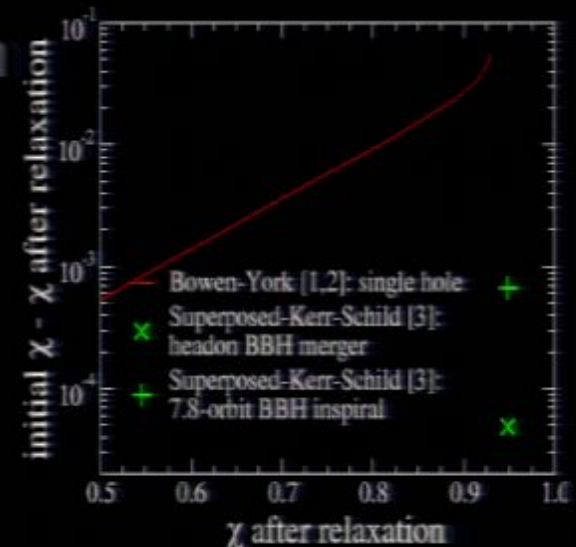
Abstract: n/a

# Numerical simulations of binary black holes (BBH) with nearly extremal spins

Geoffrey Lovelace, Mark Scheel, and Béla Szilágyi

- Black holes may have (spin  $\sim 1$ ) via accretion
  - BBH simulations predict waves, spacetime
- Initial data
  - Typically: spin  $\chi := S/M^2 \lesssim 0.93$
  - **Higher spins**: ID based on superposed BH
- Simulations (in progress)

Decrease in spin  $\chi = S/M^2$  during relaxation of BBH initial data

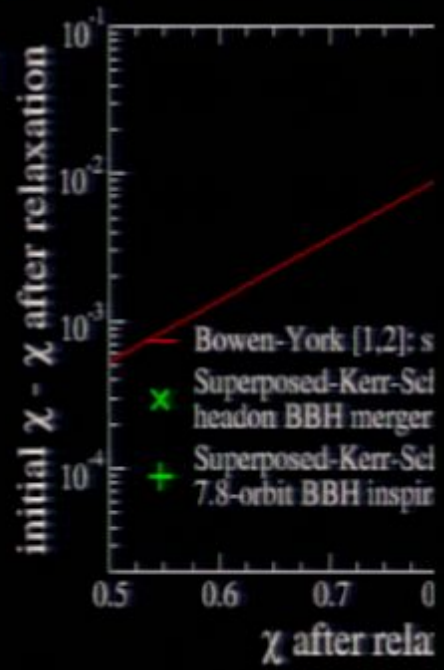


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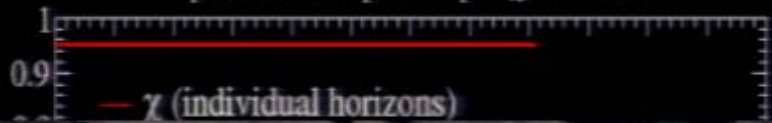
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Decrease in spin  $\chi =$  relaxation of BBH i



Equal-mass, headon plunge  
Equal, transverse, parallel spins  $\chi = S/M^2 = 0.95$



Equal-mass in:  
Equal, anti-aligned spins  $\chi$

