

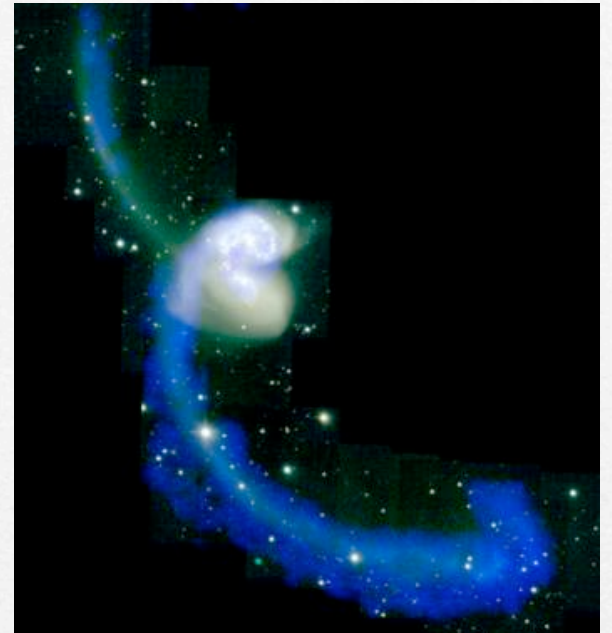
The cosmological history of supermassive black hole interactions in triples

Frederic Rasio (Northwestern University)
AAS Meeting Seattle
Press Conference
Monday, Jan 8, 2007

http://www.astro.northwestern.edu/razio/TripleSMBH_PR/

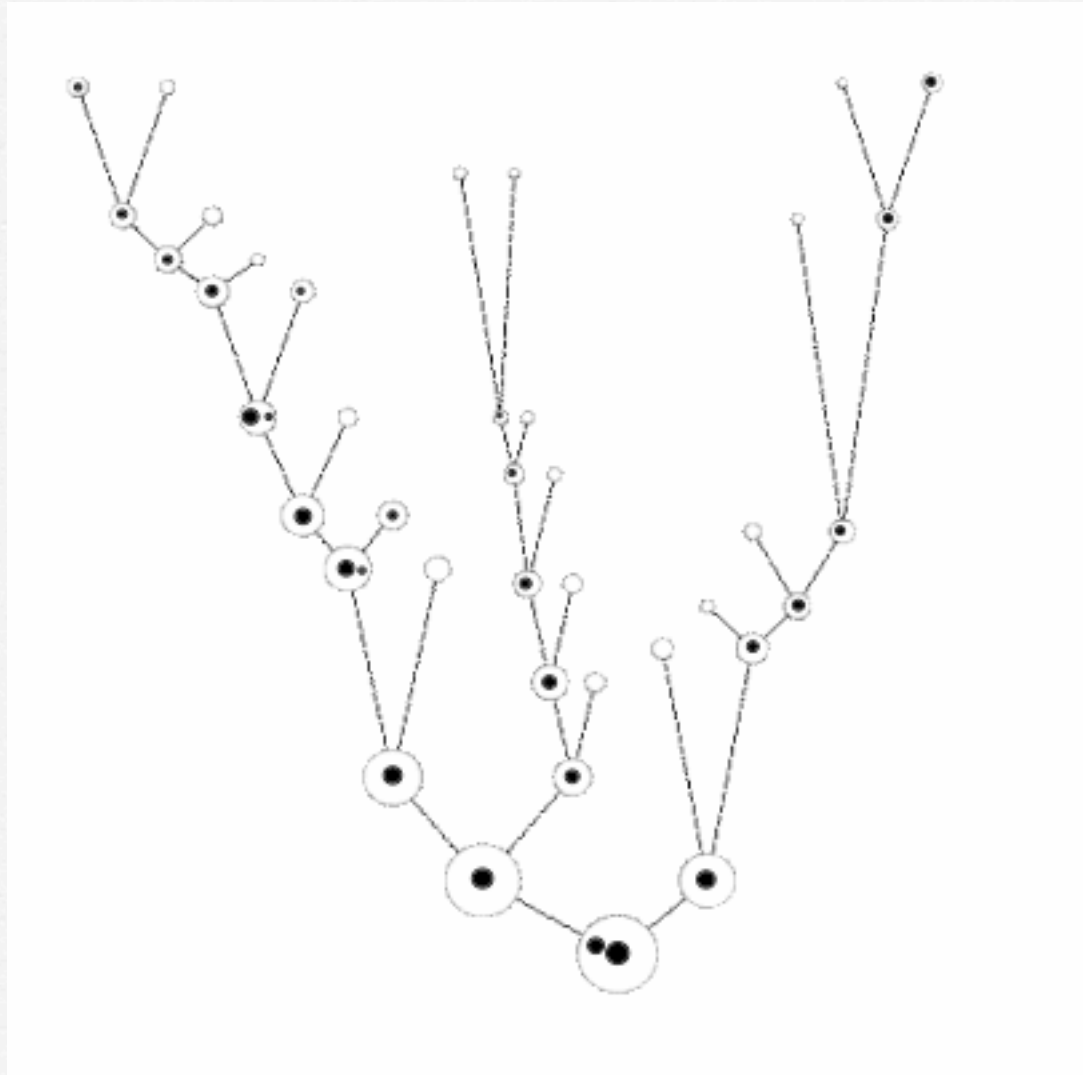
Galaxies merge

- Galaxies are not isolated 'island universes'
- they often interact, collide, merge to form larger galaxies, etc.
- Supermassive black holes at the centers of merging galaxies form binaries

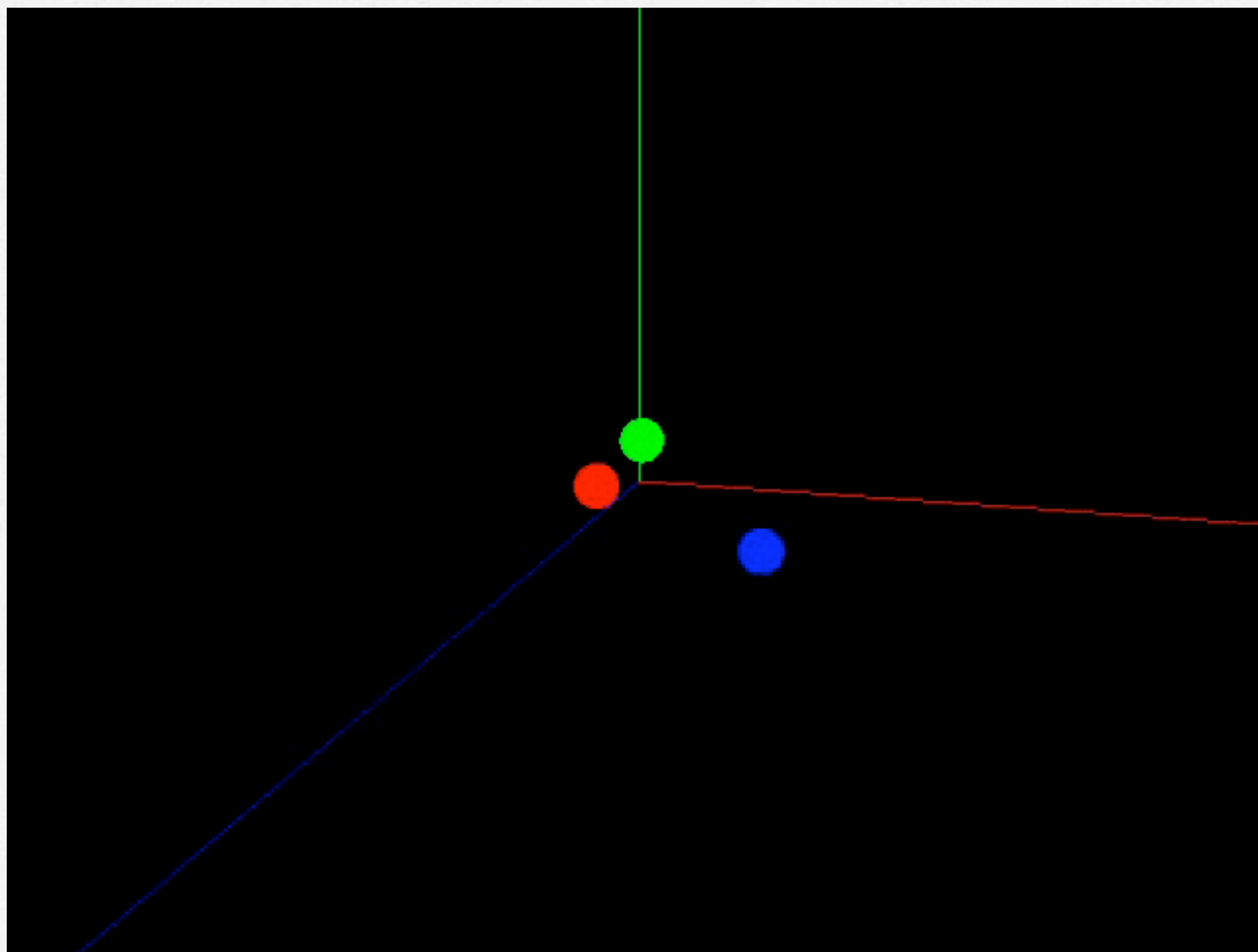


Cosmological merger tree simulations

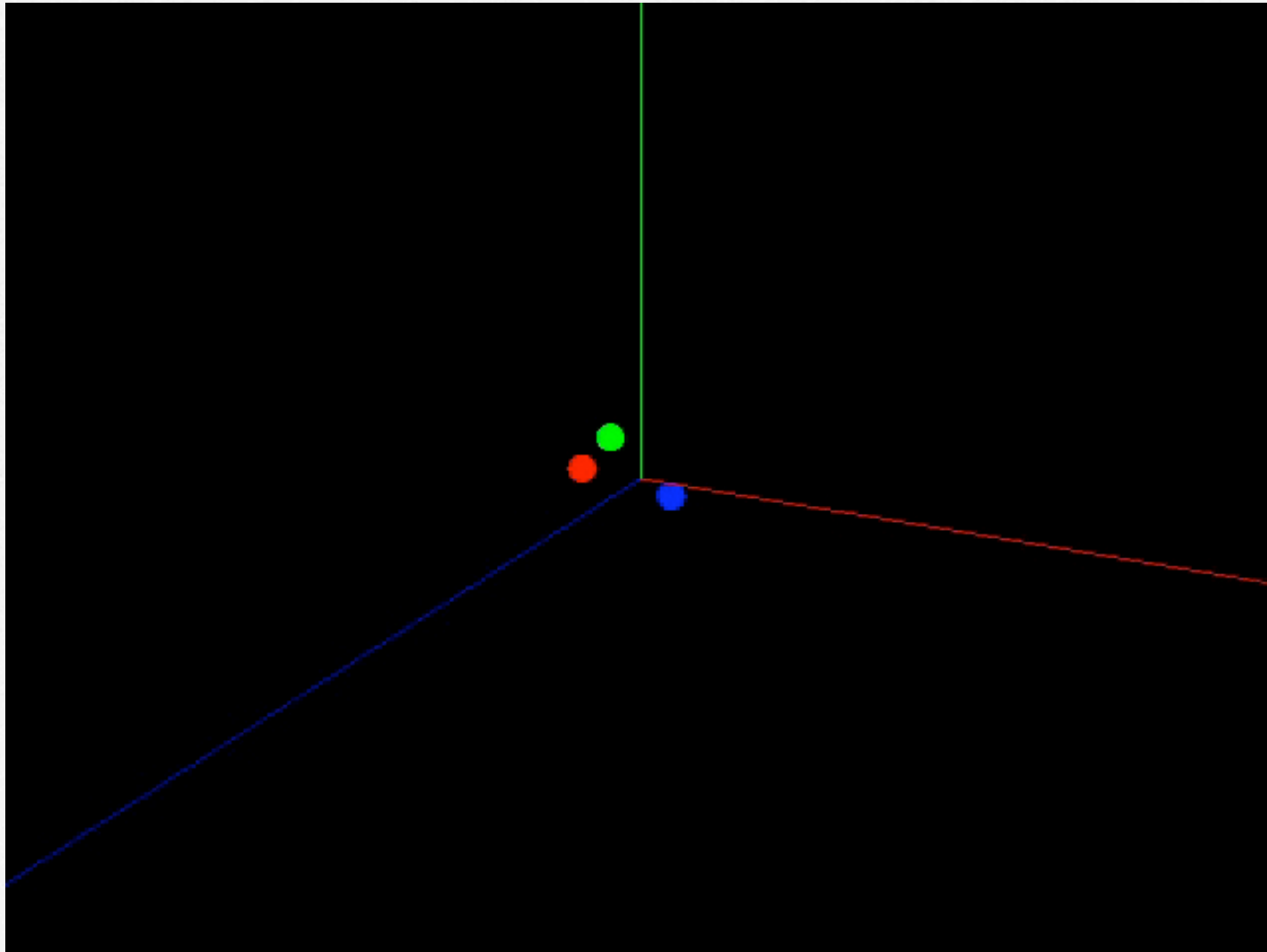
time



three is better than two

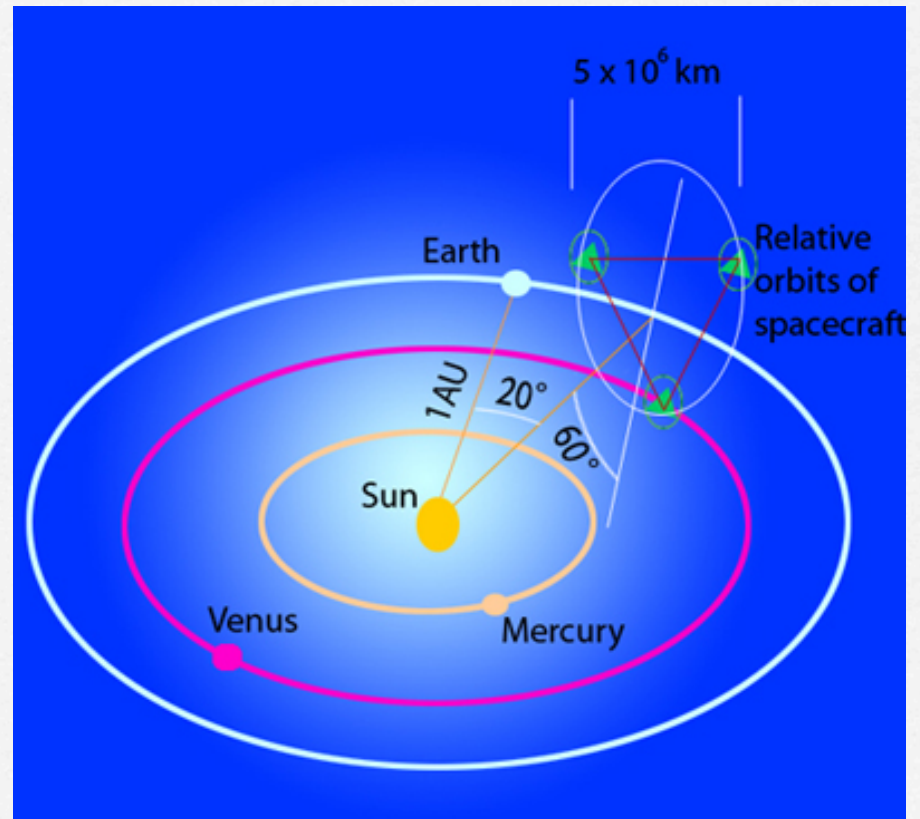
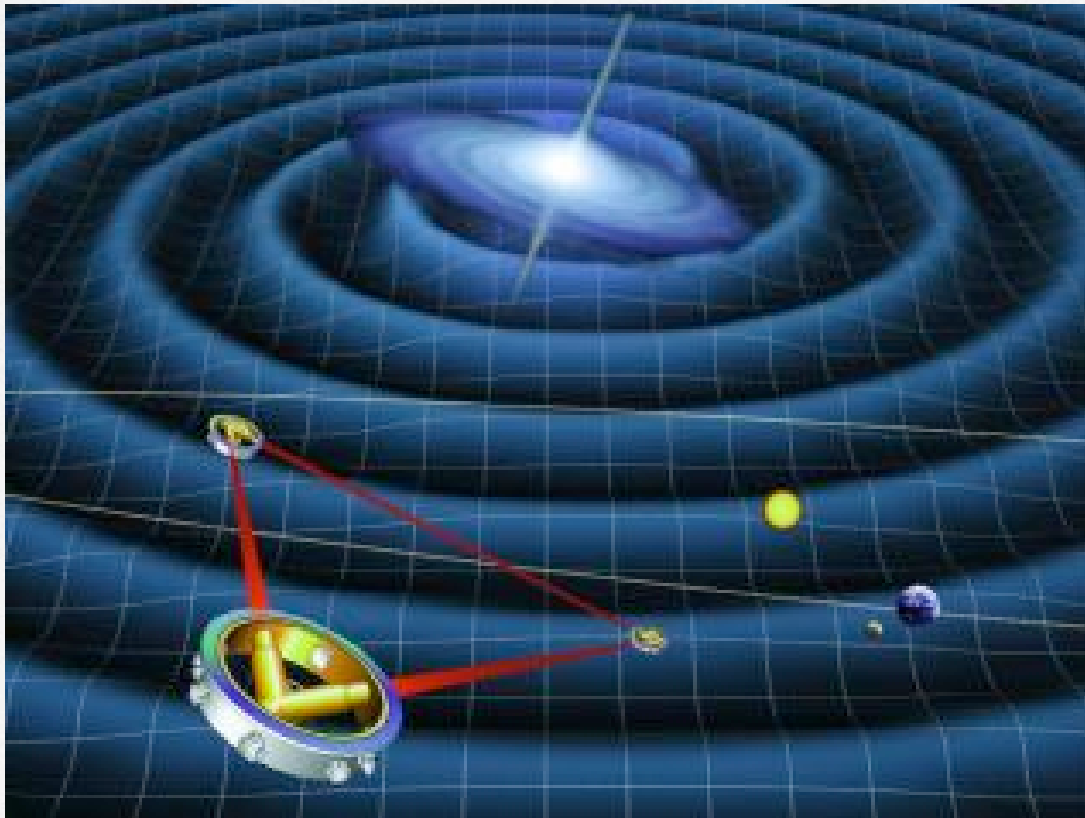


three is always fun...



LISA:

the Laser Interferometer Space Antenna



Credits:

□ Collaborators:

□ Loren Hoffman, Avi Loeb (Harvard)

□ Marta Volonteri (Michigan)

□ John Fregeau, Stefan Umbreit (NW)

□ Grant support:

□ NSF Division of Astronomy

□ NASA Astrophysics Theory Program