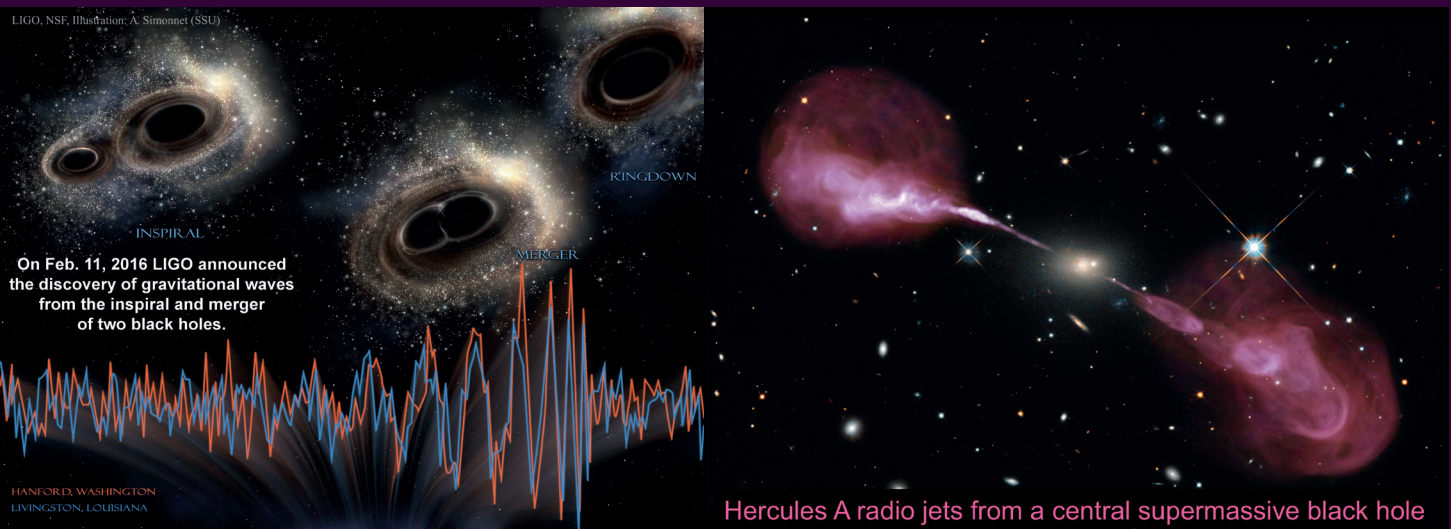


Black Holes: Dead Stars and Monsters in the Hearts of Galaxies



Tuesday 27th September 2016 – 6.30pm
Darwin Lecture Theatre, UCLan

John Kormendy

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Astronomers have a detailed picture of how the biggest stars die in supernova explosions that leave behind black holes with masses of about 10 times the mass of our Sun. We also have a rich picture of how supermassive black holes with masses of millions to billions of Suns live at the centers of galaxies.

They power quasars in which a volume as tiny as our Solar System outshines their host galaxy made of billions of stars. As in Hercules A, they fire jets of particles – like firehoses – millions of light years into space. I review how this picture got developed and how we have found direct evidence for supermassive black holes, starting with my first black hole discovery in the Andromeda Galaxy in 1988.

Now, with 86 black hole detections, we begin to understand how black holes do (and do not) affect the evolution of their host galaxies. Most recently, the spectacular discovery by the Laser Interferometer Gravitational-Wave Observatory of gravitational waves from a pair of merging black holes “nails” the outrageous concept that black holes really exist and supports our theory of how supermassive black holes got their start by mergers of dead remnants of the first stars that formed in the Universe.

For more information and to book please see:
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