

COLUMBIA ASTRONOMY OUTREACH PRESENTS:



PUBLIC LECTURE & STARGAZING

Merging Black Holes and Ripples in Space

A lecture by Sean McWilliams
Friday, January 14th, 7:00PM
Pupin Hall, Columbia University

Einstein showed us, through his general theory of relativity, that space was not a fixed stage, but rather an active participant in the dynamics of the Universe. Space curves in the presence of matter, moves matter by giving rise to gravity, and even waves when matter disturbs it. These “gravitational waves” are subtle, and are only generated in substantial quantities under extreme conditions. A pair of black holes, orbiting one another at speeds that approach the speed of light, is an example of such extreme conditions. With the aid of supercomputers, we can predict the form that these waves will take. By comparing with what we ultimately observe, we will be able to “see” the darkest objects in the Universe.



These are free lectures at a public level followed by guided stargazing with telescopes (weather permitting). All events are held at Pupin Hall at Columbia University. No reservations are needed. Lectures are 30 minutes, stargazing lasts 90 minutes.

For directions, weather updates and more information, please visit:

<http://outreach.astro.columbia.edu>