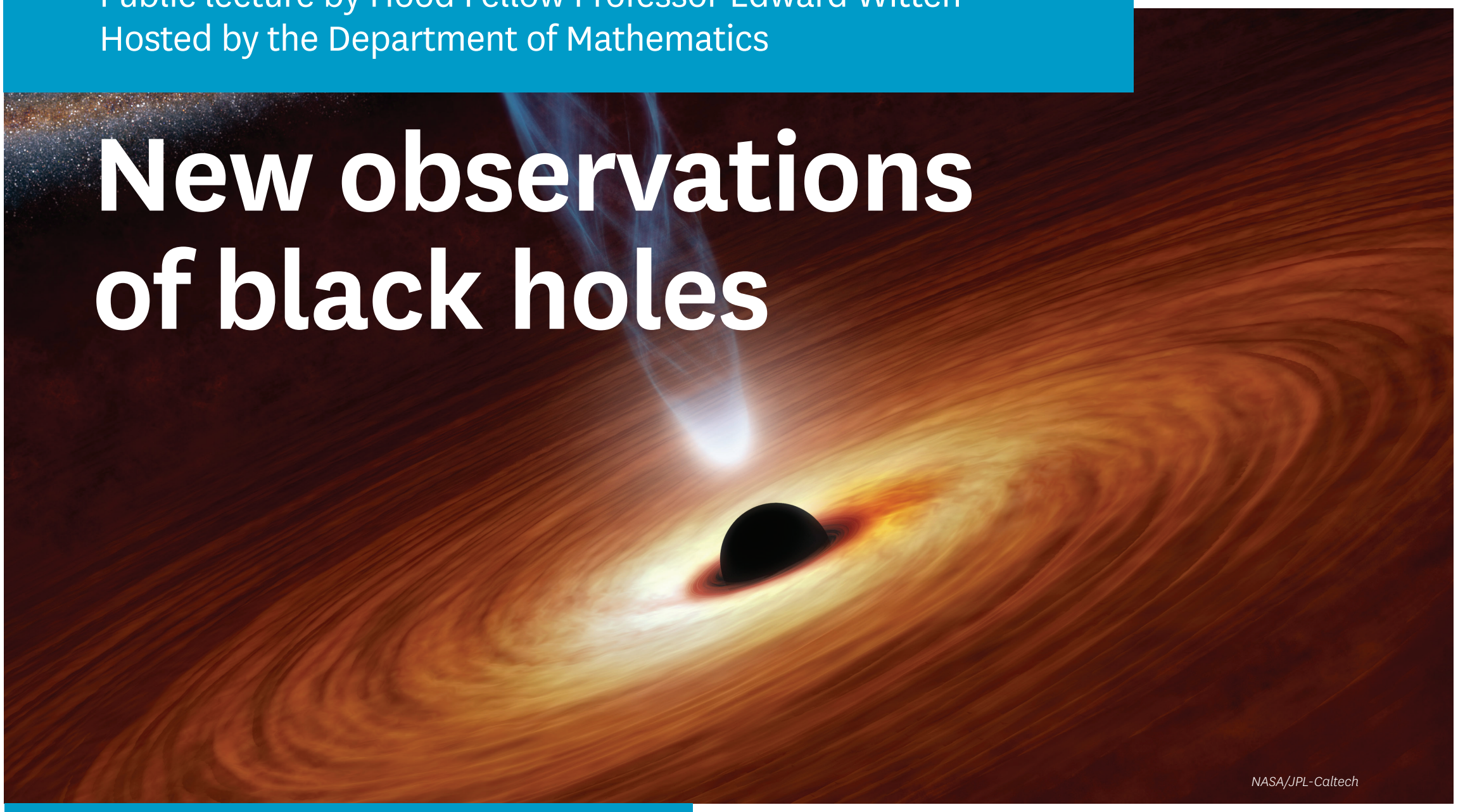
Public lecture by Hood Fellow Professor Edward Witten
Hosted by the Department of Mathematics

New observations of black holes



NASA/JPL-Caltech

For decades, black holes seemed almost in the realm of science fiction rather than science, and for decades more, though astronomers gained strong evidence for their existence, this evidence was generally quite indirect. But in the last few years, our observations of black holes have become far more direct and incisive, through observations of gravitational waves from colliding black holes as well as direct imaging of the environment of a supermassive black hole in a relatively nearby galaxy. In this talk, I will give an introduction to these new observations.

The supermassive black hole at the core of supergiant elliptical galaxy Messier 87, with a mass ~7 billion times the Sun's, as depicted in the first image released by the Event Horizon Telescope (10 April 2019).

***Edward Witten** is an American theoretical physicist and professor of mathematical physics at the Institute for Advanced Study in Princeton. He is undoubtedly one of the most influential mathematical physicists of our time. His work on understanding the fundamental interactions in nature has gone far beyond physics and impacted pure mathematics in an unprecedented way.*

Professor Witten has published more than 300 scientific papers and in 1990, he became the first physicist to be awarded a Fields Medal by the International Mathematical Union, awarded for his 1981 proof of the positive energy theorem in general relativity. He appeared in the list of TIME magazine's 100 most influential people of 2004 and became a Fellow of the American Mathematical Society in 2012.

6pm, Sunday 12 January

Large Chemistry Lecture Theatre
301-G50, Ground Floor
Building 301, 23 Symonds Street

Please register at edwardwitten.eventbrite.co.nz

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