



# Astrophysical Black Holes

**Date:** September 7, 2022 (Wednesday)

**Time:** 5:00 p.m.

**Zoom Online Lecture:** <https://bit.ly/3KgAxhu>

**Meeting ID:** 970 4476 0018

**Password:** 2859



*Prof. Cosimo BAMBI*  
*Fudan University*



## Abstract:

In this talk, I will review the development of the field, from the first speculations to the current lines of research. According to Einstein's theory of general relativity, black holes are relatively simple objects and completely characterized by their mass, spin angular momentum, and electric charge, but the latter can be ignored in the case of astrophysical macroscopic objects. Search for black holes in the sky started in the early 1970s with the dynamical measurement of the mass of the compact object in Cygnus X-1. In the past 10-15 years, astronomers have developed some techniques for measuring the black hole spins. Recently, we have started using astrophysical black holes for testing fundamental physics.

## Biography:

Prof. Cosimo Bambi is Xie Xide Junior Chair Professor at the Department of Physics at Fudan University. He received the Laurea degree from Florence University in 2003 and the PhD degree from Ferrara University in 2007. He was appointed as a postdoc at Wayne State University, IPMU/The University of Tokyo, and LMU Munich. He joined Fudan University at the end of 2012 under the 1000 Young Talents Program. His main research interests focus on black holes and observational tests of gravity models. He has published more than 150 papers on high impact factor refereed journals as first or corresponding author, he has over 8,000 citations and his h-index is 50. He has published several books with Springer, either as author and editor. He has received a number of awards, including the 2018 Magnolia Silver Award for outstanding contributions to Shanghai's development and the Xu Guangqi Prize as the best Italian scholar in China.

## Key references:

<https://ui.adsabs.harvard.edu/abs/2018AnP...53000430B/abstract>

<https://ui.adsabs.harvard.edu/abs/2020mbhe.confE..28B/abstract>

Anyone interested is welcome to attend!

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