

The first image of a black hole

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I will discuss how the first image of a black hole was obtained by the Event Horizon Telescope (EHT) collaboration. In particular, I will describe the theoretical aspects that have allowed us in Frankfurt to model the dynamics of the plasma accreting onto the black hole and how such dynamics was used to generate synthetic black-hole images. I will also illustrate how the comparison between the theoretical images and the observations has allowed us to deduce the presence of a black hole in M87 and to extract information about its properties.

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Lunedì 27 gennaio 2020 ore 14.00 aula U2-06