

presents a picture of the black hole at the center of the galaxy M87. One part of the ring is brighter, because of the so-called relativistic beaming effect: the increased brightness implies that this part of the accretion disk rotates towards us. The M87 black hole is 55 million light year from Earth and is 6.5 million times more massive than the Sun. The light rays are bend so strongly that we see also the part of the accretion disk which should be hidden behind the black hole. An accretion disk is created as material falls into a black hole. Of course, depending on the system parameters, there are a plethora of other images that would also be consistent with Einstein's theory of gravity; hence, in this instance, discussing consistency is preferable to providing concrete evidence for the theory. Since the black hole was only observed at a single wave-length of 1.3 mm, the color* gradation relates to brightness rather than wavelengths (colors are fake).