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SPHERICAL PHOTON ORBITS AROUND A ROTATING BLACK HOLE

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Recently, the first image of a black hole was released. In fact, what was obtained was the shadow of the black hole called M87*. In order to obtain this image it was necessary to understand the behavior of light rays in the vicinity of compact objects. In this region of intense gravitational field, the curvature of space-time is such that even light is obliged to orbit these objects. Thus, in this work, we make a review of special orbits of this type, specifically spherical photon orbits, in the space-time of a rotating black hole.