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## Signatures of regular black holes from the shadow of Sgr A\* and M87\*

One can now truly aspire to have a better grasp of gravitational physics at the horizon scale with the recent publication of the black hole image of Sgr A and the prior image of M87. In this study, we explore the possibility that the observed shadow of M87 and Sgr A can be explained by a standard black hole scenario with a Minkowski core. Regular black holes are intriguing because they can avoid the r = 0 curvature singularity that develops in general relativity. They often emerge in Einstein gravity linked to non-linear electrodynamics. We compute the observables related to the black hole shadow using the previously obtained mass and distance. These when compared with the observed angular diameter reveal that the shadow of M87 and Sgr A favour the regular black hole scenario with a small but non-zero non-linear electromagnetic charge.

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