



The Nobel Prize Winning Works on Studying Gravity

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There are three fundamental ways to study strong gravity in the vicinity of black holes: "Hearing" via Gravitational Waves, "Feeling" via the Gravitational Forces on nearby stars, and "Seeing" via the Imaging of the Shadow around black holes caused by the bending of the light due to General Relativity. The first two types of studies have now won the Nobel Prize in Physics in 2017 and 2020. Taiwan has played a central role in the detection of the shadows around the supermassive black holes in the M87 Galaxy and the Milky Way Galaxy, reported in 2019 and 2022. In this talk, we will explain the three experiments and the story behind the work, as well as the future in this field.