- 1. The concept of fields (magnetic fields, electric fields, gravitational fields) was first put forward by the physicist Faraday. Michael Faraday (1791 –1867) was an English scientist who contributed to the study of electromagnetism and electrochemistry.
- 2. A bead (/bi:d/) rolling in a funnel is a good illustration of general relativity because it shows that the bead follows the curvature of the funnel in the same way as a massive object like the sun warps space-time compelling the planets at a distance to turn around it. Thus, the gravitational force is a force at distance that can be interpreted as a modification of space-time.
- 3. The point of the orbit of Mercury closest to the sun moves every year 0.43 seconds of arc more than Newton's theory predicts. In fact, Mercury follows the orbit predicted by Einstein and not by Newton. This is one of the first demonstration of general relativity.
- 4. The other demonstration of general relativity is the bending of light as it passes close to a star, this deviation was observed the first time in 1919 by the English astronomer Eddington during a solar eclipse.
- 5. A collision between two black holes can produce a gravitational wave, it is a disturbance of space-time that propagates from its source at the speed of light. It was observed in 2015 by the LIGO (Laser Interferometer Gravitational-wave Observatory).