

# Einstein Lectures

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## **Light Bending by the Sun and Black Holes**

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120 PHYSICS

### **Abstract**

Light deflection by the sun was computed using Newtonian theory by Johann von Soldner as early as 1801. However, it was not until the creation of General Relativity in 1915 to describe gravity that the correct expression for the bending angle was established by Einstein. The confirmation of this result in 1919 by Sir Arthur Eddington became the most famous test of this new gravitational theory and launched Einstein's celebrity in the 1920s. I'll show how to derive the bending angle Einstein found as well as the angle for how much a black hole bends light.