

The Einstein Equation

Jun'ichi Yokoyama

Professor, Research Center for the Early Universe, the University of Tokyo
and Kavli IPMU Senior Scientist

Newton, who established the theory of classical mechanics, considered the space simply as an unchangeable container of massive bodies. According to the Einstein equation discovered in 1915, however, the status of spacetime is characterized by materials and energy existent there—more properly speaking, the state of spacetime and the condition of matter and energy there, are mutually related by the Einstein equation in an inseparable manner. Once upon a time, it was said that “there are only three people who fully understand the Einstein theory.” (Although it was not identified who they were.) Nowadays, a number of researchers enjoy the benefit of the equation.

