



The CERN Accelerator School

Contribution ID: 4

Type: **not specified**

Relativity for Accelerators

Monday 11 March 2024 13:55 (1 hour)

The goal of this lecture is to introduce the basic concepts of special relativity without overloading formulas. The theory of special relativity, originally proposed by Albert Einstein in his famous 1905 paper, has profoundly affected our view of physics, space, and time. This lecture briefly introduces the concepts behind special relativity, including length contraction, time dilation, the Galilean and Lorentz transformations, relativistic kinematics, Doppler shifts, practical application of the theory and more.

Presenter: SHREYBER, Irina