1172-83-309 **Larissa V. Sbitneva*** (larissa@uaem.mx), Av. Universidad 1001, Chamilpa, 62209, Av. Universidad 1001, Chamilpa, 62209, 62209 Cuernavaca, Mexico. *Zbigniew Oziewicz' alternative to the Einstein's special relativity theory.* Preliminary report.

We will describe the controversy related to the rival alternative to the Einstein's special relativity theory suggested by Zbigniew Oziewicz and the models based on the non-associative law of the summation of Einstein velocities. Our mathematical interactions, concerned mostly to non-associative algebraic structures associated to the Relativity. But there originated some controversy in the last few years, which Zbigniew Oziewicz expressed in various conferences and publications concerning to his alternative to the Einstein's special relativity theory. The main controversy consists in the fact that the non-ssociative constructions presume the existence of the neutral element, which is zero in the model of A. Ungar and is unit element in a loop describing the underlying geometry. We will describe how a set with binary operation, called quasigroup, is related to symmetric space as a underlying geometry for the Einstein summation law and their relation with the loop theory. Zero velocities play the role of two-sided units, which imply the consequences for the inverse elements. We will emphasize the role of a neutral element in the Einstein sum of velocities: In our model and in the smooth binary systems It always exists due to the theorem of Mal'cev 1955 (Received August 31, 2021)