

Abstract Submitted
for the APR08 Meeting of
The American Physical Society

Time and Consistent Relativity Theory LYUBOMIR T. GRUYITCH,
Retired — Physical reality permitted to characterize clearly and fully the properties of *time*. They imply both the physical sense of *time* relativity and the mathematical fundamentals of a new, consistent, relativity theory. New formulae for temporal and spatial coordinates express *time* independence of space, which is a priori rejected in Einstein's theory. They and those for velocity and acceleration, as well as for mass, force, and energy, are crucially different from Einstein's formulae in the general case. The values of all variables in them are consistent relative to scales and units, but not in Einstein's. In the special case the formulae take the known form, but rest still more general than Einstein's. They reduce to Einstein's in the particular singular case determined by Einstein's assumptions. A proved result of the theory is that for every speed, not only for the light speed, we can define easily co-ordinate transformations such that the chosen speed is invariant relative to the transformations. Such transformations for the light speed are the Lorentz transformations. The Lorentz-Einstein invariance of the light speed is neither the property of light nor of its speed.

Lyubomir T. Gruyitch
Retired

Date submitted: 10 Jan 2008

Electronic form version 1.4