Abstract Submitted for the FWS16 Meeting of The American Physical Society

Not All Physical Laws are the Same in All Inertial Reference Frames FLORENTIN SMARANDACHE, Univ of New Mexico — The laws of physics are not the same in all directions for a moving object according to the Special Theory of Relativity, since lengths which are oblique to the direction motion are contracted with the oblique-factor $OC(v,\theta)$, while the lengths along the motion direction are contracted with a different factor C(v), but lengths that are perpendicular to the direction motion are not contracted at all; which require different inertia values for the moving object. There are universal constants that are not quite "constant" throughout the universe. Would it be possible to get physical systems where the energy conservation law doesn't hold? Would it be possible to get physical systems where the Earth's physical laws are invalid? Maybe our laws are only local, but non-local laws may apply in other galaxies. We believe on other planets, or in other solar systems, galaxies the laws of physics are not the same. The Laws of Physics are influenced by the medium composition, velocity, etc. of the frame of reference.

> Florentin Smarandache Univ of New Mexico

Date submitted: 04 Oct 2016

Electronic form version 1.4