

# Realitivistic Relativity (RR): Update 2011-03-22

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By Robert L. DeMelo

15 Sagres crescent, Toronto, Ontario, M6N5E4

Email: [mainframeii@gmail.com](mailto:mainframeii@gmail.com), [r.demelo@gigaframe.com](mailto:r.demelo@gigaframe.com)

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Recent research has raised more interesting results. Many of these results I will keep confidential until I finalize an actual release, but the following results I will share now.

The following details results which, compounded with previous RR cosmological to quantum results, cannot be easily dismissed. The current RR framework (the Relative Model), as detailed in my paper "GPRA Project: Realitivistic Relativity 2.0", has yielded another very simple, but very interesting, set of results when changing the orbital velocity (kinetic velocity) of the inner planets to the orbital velocity of Jupiter ( $v=13070m/s$ ).

The RR mass transform equation is

$$m' = \frac{m}{s(v')^2} \quad (1)$$

Where scale transform  $s(v')$  and the lambda function  $\gamma$  are

$$s(v') = \gamma^e = \left(\frac{v'}{v}\right)^e \quad (2)$$

The length transform equation is simply

$$l' = \frac{l}{s(v')} \quad (3)$$

The velocity  $v'$  is the resulting velocity of the object starting from an initial velocity of  $v$ .

Given this simple set of equations the following results are derived using the length and mass of the inner planets:

Planet	Mass (kg)	Radius (m)	Velocity (m/s)	Velocity' (m/s)	Mass' (kg)	Radius' (m)	Comparable
Mars	6.400E+23	3.396E+06	24077	13070	1.773E+25	1.787E+07	Uranus (gas giant)
Earth	5.974E+24	6.378E+06	29780	13070	5.256E+26	5.982E+07	Saturn (gas giant)
Venus	4.868E+24	6.051E+06	35020	13070	1.034E+27	8.818E+07	Jupiter (gas giant)
Mercury	3.302E+23	2.439E+06	47870	13070	3.836E+26	8.313E+07	Saturn (gas giant)

In conclusion, these results give insight that all planetoids are potentially the same type of object existing at different kinetic velocities in space-time, which is their only differentiating factor. It also gives insight that velocity changes to a planet can result in expansion or shrinkage (potential geological changes). These results also strengthen the current RR framework, in compound with many previous results, as a legitimate predictive framework uniting, on a fundamental basis, cosmological and quantum physics. It only further validates that this type of research is truly on the right track. The only unfortunate aspect of this work is that I cannot dedicate

more time to it than I do now due to occupational and recent unfortunate personal care giving needs.