# MQ

# [ Mechanics of the Quantum ]

# Property 6 :

# Relativistic mass increase follows

# weakness curve of segmental arch

*" The problem seems to me how one can formulate statements*

*about a discontinuum without calling upon a continuum…*

*…but we still lack the mathematical structure unfortunately.*

*How much have I already plagued myself in this way ! "*

Albert Einstein [1]

*" As hangs the flexible line, so but inverted will stand the rigid arch. "*

Robert Hooke [A]

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# Preface

'Mechanics of the quantum' [MQ theory] searches for the *mechanical microprocesses* of the individual and collective behaviour of quanta (interpreted as building blocks of fields, mass, energy, light…) to reveal *strong causality* behind the laws of physics, rather than interpreting things with probabilities. We refer to the preface of our previous paper **[7]** for further elaboration and discussion on this.

My work is focused on linking such processes to the laws of physics, which was induced by exact mathematical and geometrical findings. A summary can be found in Appendix 1. In the current paper, we report the precise findings of yet another observation in strong support of 'Mechanics of the Quantum'. We stayed true to the original model and the original causal principle **[2, 4]**, as we have done for the discovery of the previous 5 properties, see Appendix . Without adding new features to the model, or changing the initial setup in any way. There is also no curve fitting with an abundance of parameters involved in this research.

However, a recent observation of a strong parallel between the weakness parameter for segmental arches, and the relativistic regime of Gamma, forced us to include a natural flattening of the quanta, to insure the transition from the Newtonian regime to relativistic effects, within the MQ-model. Thus generalizing the MQ-model. We haven't yet readjusted the geometry in the MQ-model, but this paper provides the foundation for that, supported be precise measurements.

And as usual, I hope that complementary skilled people (theoretical physicists, experimental physicists, engineers, philosophers,...) will look into this work, and extend and improve it with their particular set of knowledge, skills and talents.

Remark :

Concerning the use of 'relativistic mass increase' in the title of the paper, we would also like to refer to further elaboration and interpretation of $E = \gamma mc^2$ here : ' The equivalence of mass and energy ' Link https://plato.stanford.edu/entries/equivME