

Leibniz is still alive –
and so are his mathematical ideas in the third millenium

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In the current year 2016, we are celebrating the third centennial of Leibniz's death. This is a good occasion to present some highlights in the immense mathematical work of the great universal genius under a modern point of view, and to add some surprising interpretations that might have elapsed the Big Master of Science – or consciously hidden by himself in order to prevent plagiarism.

Here are some problems we shall discuss and solve by surprising methods:

- (1) How to compare Leibniz's harmonic triangle with Pascal's triangle?
- (2) How to compute infinite sums of reciprocal hypergeometric numbers?
- (3) How to vizualize the Leibniz series with a pizza?
- (4) How to understand that a hanging chain cannot be a parabola, and how to find its real shape?
- (5) How to determine logarithms by using a file?
- (6) How to compute the area of a Portuguese windmill wing by rotating the wheel?

Our approach will be supported by the modern slogan: "A picture is worth a thousand words".