## Erwin Schrödinger's 128<sup>th</sup> Birthday Matches his Birth Date

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Erwin Rudolf Josef Alexander Schrödinger (12 August 1887 – 4 January 1961) was a Nobel Prize-winning Austrian physicist who developed a number of fundamental results in the field of quantum theory, which formed the basis of wave mechanics: he formulated the wave equation (stationary and time-dependent Schrödinger equation) and revealed the identity of his development of the formalism and matrix mechanics. Schrödinger proposed an original interpretation of the physical meaning of the wave function [1].

In addition, he was the author of many works in various fields of physics: statistical mechanics and thermodynamics, physics of dielectrics, color theory, electrodynamics, general relativity, and cosmology, and he made several attempts to construct a unified field theory. In his book titled "*What Is Life?*" Schrödinger addressed the problems of genetics, looking at the phenomenon of life from the point of view of physics. He paid great attention to the philosophical aspects of science, ancient and oriental philosophical concepts, ethics, and religion. He also wrote on philosophy and theoretical biology. He is also known for his "Schrödinger's cat" thought-experiment.

Today, 12 August 2015, marks Schrödinger's 128<sup>th</sup> birthday. In his honor, I constructed the following numerical brainteasers:

- 1. Schrödinger's 128<sup>th</sup> birthday matches his birth date. How so? If his birthday number 128 is interpreted in the day-month calendar date format as 12-8, it corresponds to Schrödinger's birth date, 12 August. Isn't this a special fun coincidence?
- Further, number 128 is Schrödinger's highest-power birthday to occur so far since 128 is 2<sup>7</sup>. Interestingly enough, if the places of digits 2 and 7 in 2<sup>7</sup> are switched, 7<sup>2</sup> yield 49, which equal the sum of the prime factors of 2015 (which are 5, 13, and 31).
- 3. If numbers 1 to 30 are assigned to the letters of the German alphabet as A being 1, B is 2, C 3, etc., the numbers assigned to the letters of "Erwin" and "Schrödinger" each add up to 69 and 133 respectively and twice the difference of these two numbers yield 128.
- 4. Also, 128 plus the reverse of 69 ("Erwin") equals 128 + 96 = 224 and coincidentally, the 224<sup>th</sup> day of any non-leap year (such as 2015) is Schrödinger's birth date, 12 August. Wow! In addition, four-thirds of 96 equal 128.
- 5. Note that  $128 = 2^{7}$ , where digits 2 and 7 differ by 5. Interestingly enough, 7 x  $2^{5} = 224$ .
- 6. The reverse of 128 is 821 where 821 happen to be the 142<sup>nd</sup> prime number. Now, start from 31 December as being day one and count the calendar dates of a year backwards. Which day corresponds to the 142<sup>nd</sup> day? (Answer: 12 August!)
- If Schrödinger's 128<sup>th</sup> birthday written as 12-8-2015 is split into numbers 12, 8, 20, and 15, these numbers add up to 55, which coincides with the sum of the numbers assigned to the letters of Schrödinger's name, "Josef". Also, 4 January 2016 will mark the 55<sup>th</sup> anniversary of Schrödinger's death.

Happy 128<sup>th</sup> birthday, Erwin Schrödinger!

[1] Erwin Schrödinger, Wikipedia https://en.wikipedia.org/wiki/Erwin\_Schr%C3%B6dinger