

Tatranská Lomnica, Slovakia,  
March 21, 2014

## Review of book

**TITLE: The Infinite History of NOW.** A Timeless Background for Contemporary Physics

**AUTHORS: Davide Fiscaletti & Amrit Srecko Sorli**

In their book "The Infinite History of Now", the authors Davide Fiscaletti and Amrit Srecko Sorli present a revolutionary concept of our understanding of time. I remember a discussion with my colleagues about the question if time, as a physical quantity, can be completely removed from physics (in principle, of course). In a mechanical concept, time is a measure of change, for example, a change of position of an object. The changes, say, in the object's  $y$  and  $z$  coordinates can be given, alternatively to the time derivatives of these coordinates, as the multiples of the change of its  $x$  coordinate. Or, more universally, we can describe the changes of all these coordinates as the multiples of change of the position of photon corresponding to, e.g., a displacement of the object in  $x$  coordinate from the position  $x_1$  to  $x_2$ . It seems, the time could be regarded as an analogue of money in economy and market. Money are not any true goods. For example, they cannot be eaten, but you can use them to buy a food. Money cannot be dressed, but you can use them to buy a dress. They cannot transport you from one city to another, but they can serve you to buy the travel tickets, etc. Neither time can be regarded as the proper physical quantity, but it can be used to express the measure of change of whatever else, true, physical quantity. In principle, the market can be functional without money, but it would be terribly heavy going. The same is valid with the time: physics would be heavy going without time, but such physics still seems to be possible in principle, at least in the mechanical concept. In the time of the above mentioned discussion, all this was only an idea, which was soon forgotten. It was surprising and amazing to read that Davide and Amrit not only suggested a very similar concept, but they developed this concept to a consistent theory. The notion of time as nothing more than „numerical order of material change" is actually interesting. One must agree that „when there is no change there is no time".

One must admire the courage of the authors to go with their suggestions and deductions well beyond the border of common, main stream science. Sometimes they occur, in their discussion, even at the border of that is still acceptable as the serious science. Such the attitude appears, however, to be largely fruitful for a reader who seeks for the new ideas in the physics. The original, often unexpected, proposals introduced by Davide and Amrit much more intensively excite the human imaginative power and support a thinking about further consequences or possibilities than a rigorous description of well-known theories, which can be found in common textbooks on physics.

Besides other ideas and explanations, the authors use their concept of timeless space to propose an original approach to the unification of quantum theory and general relativity. As well, they suggest a new concept of vacuum, being granular in the most fundamental, Planck-scale level, and concept of instantaneous communication between the quantum entities.

The book is also useful to know about an existence and basic concept of a number of less-known, alternative, physical theories, which were published as the parallels with the main stream theories. One can find the references to the works of about two dozens of the alternative-theory authors. Of course, Davide and Amrit also mention the well-known advanced recent theories as, e.g., the string, superstring, or loop quantum gravity theory.

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