about the emergence of the Anglo-Dutch Liberal faction of Paolo Sarpi's heritage, as the hegemonic, oligarchical form of imperial maritime culture, chiefly Anglo-Dutch Liberal financier-imperialism, of Europe and most of the world beyond, during most of the time since that point. The emergence of the U.S. Federal republic as seen in admiration for U.S. President Franklin D. Roosevelt, from among many nations, is what is to be seen as having been the principal design for a successful challenge to Anglo-Dutch global imperialism since that time, to the present date.

The Ontological Infinitesimal

For the subject of this present report, which is essentially a matter of physical science, more than politics otherwise, the relevant pro-Classical argument can be fruitfully selected and adopted from the treatment of that kind of distinction between "naturally" and socially generated catastrophes, as proffered by Plato in his ***Timaeus***. For the purpose of this present discussion, I focus attention on the effect of catastrophes induced by a failure of a society to progress in ways which, at the least, overcome the attrition inherent in any, scientifically, "zero technological growth" system, that through the qualitative advances in the scientific-technological practice on which the society's resistance to decadence always depends.

Since the developments typified in the content of the revolutionary work of Vernadsky and Einstein through, approximately, the time of their deaths during, and in the aftermath of several years during and following the 1939-1945 "World War,"[15] we are properly obliged to recognize the subject-matter of "physical universe" as being represented by three distinct, but nonetheless inseparable qualities of phase-spaces: 1.) The "ordinary" abiotic, 2.) The Biosphere, and 3.) The Noösphere. Following the line of work by Academician V.I. Vernadsky, the principled physical distinctions among these phase-spaces are to be located systemically (experimentally) in their common domain, that of the practice of physical chemistry in the footsteps of those such as Louis Pasteur, D.I. Mendeleyev, William Draper Harkins and Vernadsky.[16] However, the three identified phase-spaces are also interacting, and evolving *dynamically* as a set: the one shaping the conditions which shape the evolving existence of the other.

The method by which these phase-spaces are to be distin-

15. Vernadsky died in January 1945, Einstein in April 1955.

16. And also, implicitly, in that work of Max Planck which was so viciously attacked by the German and Austrian followers of the radical reductionist Ernst Mach, during the period of the 1914-1917 warfare.

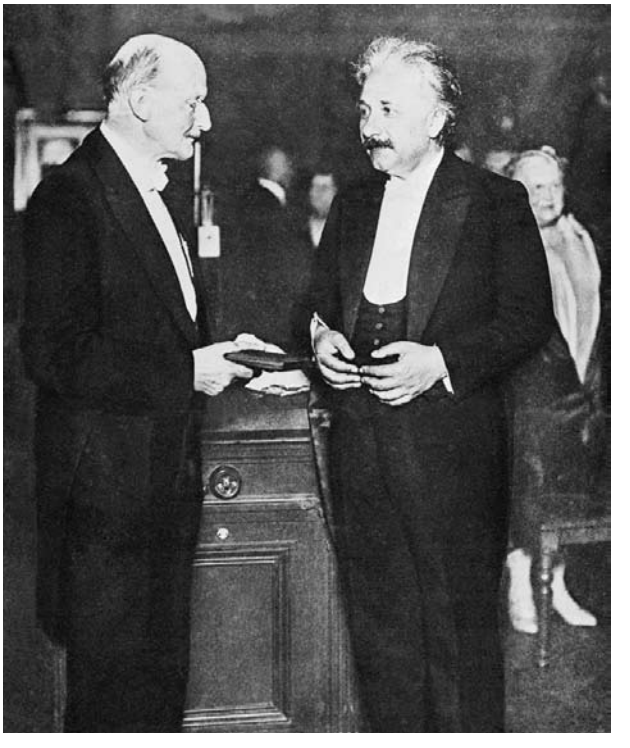
Einstein on Kepler

Here are excerpts from an essay by Einstein, in commemoration of the 300th anniversary of Kepler's death. It appeared in the Frankfurter Zeitung *on Nov. 9, 1930.*

In anxious and uncertain times like ours, when it is difficult to find pleasure in humanity and the course of human affairs, it is particularly consoling to think of the serene greatness of a Kepler. Kepler lived in an age in which the reign of law in nature was by no means an accepted certainty. How great must his faith in a uniform law have been, to have given him the strength to devote ten years of hard and patient work to the empirical investigation of the movement of the planets and the mathematical laws of that movement, entirely on his own, supported by no one and understood by very few!…

One can never see where a planet really is at any given moment, but only in what direction it can be seen just then from the Earth, which is itself moving in an unknown manner around the Sun. The difficulties thus seemed practically unsurmountable.

Kepler had to discover a way of bringing order into this chaos.



Max Planck gives a medal to Albert Einstein in Berlin, June 28, 1929.