## Article from 15 May 2007 in *Die Zeit*: Das Ende der Schwere (The End of Gravity)

In its 15 May 2007 issue the well known German weekly paper *Die Zeit* published an article (<u>http://images.zeit.de/text/2007/21/T-Antigravitation</u>) entitled *Das Ende der Schwere (The End of Gravity*) reporting about the recent experiments by Dr. M. Tajmar and his colleagues, ARC Seibersdorf, Austria on the **generation of artificial gravitational fields (AGF)**. We would like to point out that this article contains the same two misconceptions like the previous article published by the magazine *PM*, see our remarks from 20 March.

We believe that there is a good chance that *Dr. M. Tajmar* (an excellent experimenter and serious scientist) and his colleagues are correct, having actually produced AGFs, also termed gravito-magnetic field (GMF), in the laboratory. In contrast, the work by *Podkletnov*, who is also mentioned in the *Zeit* article, has no credibility at all.

The Zeit article, however, misses the point on two aspects.

*First*, the artificial gravitational field as measured by Dr.Tajmar et al. is produced by a small, rotating superconducting Niobium ring, being subjected to angular acceleration or deceleration that is, its angular frequency (rpm) changes. Only while the ring is accelerated or decelerated, the AGF exists. The AGF measured lies *in the plane of the rotating superconducting ring*, has *rotational character* and is acting against the mechanical acceleration, obeying some kind of gravitational Lenz rule. In other words, the AGF tries to slow down or to speed up the ring, respectively. It therefore cannot be used as a propulsion principle for a UFO as mentioned in the *Zeit* article. *Second*, as we also wrote in our remarks concerning the *PM* article, *General Relativity* cannot be used to explain the existence of the AGF as measured by Dr. Tajmar. The so called frame dragging phenomenon, as predicted by GR, is more than 20 orders of magnitude smaller, and cannot be observed in the laboratory using the small mass of the superconducting ring. *New physics* would be needed to explain these experiments.

Since 2002 we published several papers on a theory termed *Extended Heim Theory* (EHT) that predicts six fundamental forces in Nature (two additional gravitational interactions that may be responsible for dark matter and dark energy). EHT was used to analyze Dr. Tajmar's experiments, and good agreement between EHT and experiment was obtained (see our note from 23 April). Moreover, EHT provides additional guidelines for a so called *gravito-magnetic space propulsion experiment*. If EHT is correct, the AGF generated in this experiment would be directed along the axis of rotation of the disk or ring rotating with constant angular frequency. If this experiment turns out to be true, then it would be justified to write about *The End of Gravity*.