## **Further Results of Flat Space-time Theory of Gravitation**

Walter Petry

Mathematisches Institut der Universität Düsseldorf, D-40225 Düsseldorf

Reprint requests to Prof. W.P.; E-mail: wpetry@meduse.de or petryw@uni-duesseldorf.de

Z. Naturforsch. **60a**, 255 – 264 (2005); received January 10, 2005

The anomalous acceleration of spacecrafts in the solar system is explained. An explanation of the observed superluminal velocities of jets at extragalactic objects is given. The extension of quasars can be larger as generally assumed, i. e. quasars must not be very compact objects. An explanation of the high energy loss per unit time of quasars is given. The relation between the velocity of an object in the universe and its redshift is stated. All these results are received from cosmological models studied by flat space-time theory of gravitation and the post-Newtonian approximation of perfect fluid in these cosmological models where clocks at earlier times are going faster than at present.

Key words: Flat Space-time Theory of Gravitation; Cosmological Models; Anomalous Acceleration; Superluminal Velocities; Extension and Energy Loss of Quasars.