

ON THE EVALUATION OF THE MUNICH-FRASCATI WEBER-TYPE EXPERIMENT*

PETER KAFKA

Max Planck Institut für Physik und Astrophysik, Munich, F.R.G.

Abstract. Both the theory of optimal evaluation, developed in Munich, and tests with artificial pulses suggest that the Munich-Frascati experiment was more sensitive to short gravitational pulses than the Maryland-Argonne experiment. This was the case even in April 1973, before the Munich sensitivity was increased by another factor of 5. Nevertheless, the coincidences between Munich and Frascati did not show any surplus number for zero time delay.

It is concluded that Weber's events very likely were not due to gravitational radiation. However, a tape with four days of data from Maryland and Argonne (June 1973), which Weber kindly sent to us, does show a peak at approximately zero time delay, about 0.3 s wide and centered at 0.1 s time delay. The significance is not quite 2 standard deviations for the zero delay bin, but higher when the bins are chosen 0.3 s wide. No explanation can be offered at the moment.

* A paper with the same title is contained in the proceedings of the Colloque International C.N.R.S. No. 220 *Ondes et radiations gravitationnelles*, Paris, 18-22 Juin 1973.