

SUMMARY OF THE GR6 CONFERENCE†

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Being asked to deliver a summary at a conference is certainly a sign of getting old. Feeling still young, I prefer to consider as my duty to give a talk consisting of impressions of the reports presented at the morning sessions of the Conference. Most of these reports were reviews of research done by many people and there is obvious difficulty, even one of a logical character, with summing up the summaries.

Physics is done by people and it would be hard to talk about the Kerr solution without mentioning Kerr. Merely to read the list of people whose important contributions were discussed at the Conference would probably take up all my allotted time. Therefore, no significance should be attached to the number of times any particular name appears in my talk, zero, of course, being a number as good as any. To confuse those who might think otherwise, I decided not to mention the names of the persons who read the invited lectures at the Conference.

In very general terms, my impressions from the Conference are as follows:

First of all, there has been reported significant work in *experiments* and *observations* of general-relativistic effects. None of the described results is in a clear contradiction with Einstein's theory and the precise measurements of the retardation of radar signals [1] and of the deflection of radio waves by the Sun [2] seem to support the theory rather well. There is a small discrepancy between the Einstein value and one set of measurements of the deflection of radio waves coming from 3C279 [3]. There are good prospects for improving the radar measurements so as to reduce the error in the time delay test to 0.3% and to obtain a separation of the general-relativistic effect of perihelion motion from the influence of the quadrupole moment of the Sun. We have also been told that it is conceivable that second-order general-relativistic effects will be detectable in the 1980s.

† The author is indebted to those speakers at the Conference who sent him in advance the manuscripts of their lectures. The present text closely follows the actual, informal talk given at the meeting.

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