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## Concluding Remarks

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## Concluding remarks

BY R. D. WILLS

A few years ago it looked as though satellite  $\gamma$ -ray astronomy would suffer a lull in activity between succeeding generations of experiment, interest being concentrated in the important parallel investigations with balloon-borne and ground-based experiments. However the longevity of COS-B is now creating an unexpected work load for many of its experimenters. While continuing to process and analyse the data, they are becoming increasingly involved in the development of hardware for GRO, which, as has been reported, has just passed what should be the last major hurdle on the path to becoming an approved mission. This has led the Caravane Collaboration to a greater appreciation of the interest in the COS-B results, which has been shown throughout the astrophysics community, and of the major activities in the interpretation of the results, which are now under way in many laboratories and institutions outside the Collaboration.

It is an open secret that the continued operation of COS-B is in some respects an embarrassment to E.S.A. Designed for a planned mission lifetime of two years, the satellite is still functioning nominally after more than five. Although provision for supporting such lengthy operations was never envisaged in the long-term budget of the Agency's science programme, the Director of Science has managed somehow to find funds to continue orbital operations and to keep his books balanced. Earlier this month the Science Programme Committee recommended that he look again at the budget for 1981 with a view to continuing the extended mission, which currently appears to be completely technically feasible. I am sure it is not only the Caravane Collaboration who will be deeply appreciative and grateful if he brings off the miracle once more.

It is especially fortunate that COS-B has not been switched off (as it nearly was on more than one occasion in the last twelve months) because when the supernova in NGC6946 was discovered at the end of October it was possible to reorient the satellite to bring that galaxy into its field of view. It is too early yet to give any indication about possible results but the sensitivity of COS-B is such that even a negative result will give an upper limit to the  $\gamma$ -ray flux, which will place a significant constraint on models of the supernova development.

Since this was a short meeting I have not tried to review or summarize the exciting results and ideas presented. I would just like to express the gratitude of participants and organizers alike to all who presented papers and to those who took part in the lively discussions. We all appreciate the initiative of the Royal Society, and the British National Committee on Space Research, in organizing the meeting at this significant epoch in the history of  $\gamma$ -ray astronomy.