Foreword

There has been a long felt need for holding an IAU Colloquium on Solar and Interplanetary Transients, since the previous meeting on a related topic took place in 1979. In the meanwhile, the need to monitor the 'near space weather' has increased dramatically due its effect on manned and unmanned space flights, on high power electrical systems and on terrestrial communication systems.

IAU Colloquium 154 on 'Solar and Interplanetary Transients' was held at Pune in India from January 23–27, 1995 for addressing some of the basic issues of the above subject. It was sponsored by IAU Commissions 49 and 10, and supported by the Indian National Committee for URSI, the Indian Space Research Organisation and the University Grants Commission. A major grant was provided by the SOLTIP project of SCOSTEP.

The Scientific programme was presented in 6 half-day sessions. There was a visit on January 26, 1995 to the Giant Metrewave Radio Telescope (GMRT), a new radio astronomical facility being built near Pune. The Scientific Organising Committee (SOC), which included S. Ananthakrishnan (Chair), W.A. Coles, M.R. Deshpande, M. Dryer, A. Hewish, M. Kojima, M. Neugebauer (Co-Chair), R. Schwenn, V.I. Shishov, R. Stewart, had extensive e-mail discussions before finalizing the invited speakers and the titles. The sessions were organised around major topics such as • Origin of Solar and Interplanetary Transients, • Coronal Heating and Solar Wind Acceleration, • Quasi-static Structures, • Numerical Modelling, • Satellite data from Ulysses, Yohkoh and other Spacecrafts and • IPS and other remote sensing measurements. There were a total of 49 papers, which were presented in the meeting. Most of them appear in these Proceedings as submitted by the authors in camera-ready form ready for reproduction. The editors' job was limited to minimal corrections without affecting the contents. The organisation of this volume is by these topics.

The meetings were all held in the excellent auditorium facilities of the Inter-University Centre for Astronomy and Astrophysics, located next to the National Centre for Radio Astrophysics. The participants were grateful to the Local Or-
ganising Committee (LOC), which consisted of A. Pramesh Rao (Chair), V. Balasubramanian, V. Chellathurai, P. Gothoskar, P. Janardhan, P.K. Manoharan, G. Ramamurthy, S. Shankar, S.N. Tandon, for organising the local arrangements meticulously including the daily social events for the participants as well as, particularly for the accompanying spouses.

The Proceedings have got delayed due to various reasons, the most important being the intense preoccupation of the editors in the commissioning of the GMRT.

The proceedings as well as the organisation of the meetings were greatly helped by the enthusiastic participation of Ms. Sarita Pillai and Mr. Annabhat Joshi, who corresponded with all the participants and retyped several of the papers to fit into the required format. The editors wish to express their gratitude to them.

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Giant Metrewave Radio Telescope