

kov, Moscow, and M. Rees, Cambridge),

- "The Neutral Interstellar Medium in Galaxies" (R. Genzel, Garching),
- Assessments of the satellite projects Hipparcos and Hubble Space Telescope (M. Perryman, ESTEC, and F. Machetto, STScil),
- and, besides more than one hundred poster presentations, a substantial number of shorter communications.

*U. W. STEINLIN,
Astronomisches Institut
der Universität Basel, Switzerland*

New ESO Preprints

(September – November 1990)

Scientific Preprints

725. J. Breysacher and C. Perrier: Decoding of the Light Changes in Wolf-Rayet Eclipsing Binaries: An Application to HD 5980 in the Small Magellanic Cloud. Invited contribution – IAU Symposium No. 143 on "Wolf-Rayet Stars and Interactions with Other Massive Stars in Galaxies". Denpasar (Bali), Indonesia, June 18–22, 1990.

726. G. Zhao and P. Magain: Abundances of Neutron Capture Elements in Metal-Poor Dwarfs. I. Yttrium and Zirconium. *Astronomy and Astrophysics*.

727. G. Piotto: Properties of the Globular Cluster Mass Functions. M. Stiavelli et al.: Disk-Shocking and the Mass Function of Globular Clusters.

S. Djorgovski et al.: Color and Population Gradients in Globular Clusters.

S.R. Zaggia et al.: Central Velocity Dispersion Measurements in M30 and Five Other Centrally Concentrated GGCs. To appear in *Formation and Evolution of Star Clusters* (ed. K. Janes), A.S.P. Conference Series, in press (1991).

728. P. Loddridge et al.: Dissipationless Galaxy Formation Revisited. *M.N.R.A.S.*

729. D. Bencivelli et al.: The Young Magellanic Cluster NGC 2004. *Astronomical Journal*.

730. E.A. Valentijn: Opaque Spiral Disks: Some Empirical Facts and Consequences. Invited paper presented at the IAU Symposium No. 144: "The Interstellar Disk-Halo Connection in Galaxies". Leiden, the Netherlands, June 1990. To be published in the Conference Proceedings. Ed. J.B.G.M. Bloemen, Kluwer, Dordrecht.

731. J.I. González-Serrano and E.A. Valentijn: A Rotation Curve Study of the Dwarf Sc Galaxy UGC 2259. *Astronomy and Astrophysics*.

732. D. Bettoni et al.: Stellar and Gas Kinematics of NGC 4546, the Double-Spin SB0. *M.N.R.A.S.*

733. R.M. West: A Photometric Study of (2060) Chiron and its Coma. *Astronomy and Astrophysics*.

734. R.M. West et al.: Commission 20: Positions and Motions of Minor Planets, Comets and Satellites (Positions et mouvements des petites planètes, des comètes et des satellites). To be published in IAU Transactions, Vol. XXI A, 1991.

735. A. Bragaglia et al.: Double Degenerates Among DA White Dwarfs. *Astrophysical Journal*.

736. R. Morganti et al.: The Nature of the Optical Filaments in Centaurus A: Evidence for a Beamed Ionizing Continuum. *M.N.R.A.S.*

737. A. Moneti and H. Zinnecker: Infrared Imaging Photometry of Binary T Tauri Stars. *Astronomy and Astrophysics*.

738. P.A. Patsis et al.: Self-Consistent Spiral Galactic Models. *Astronomy and Astrophysics*.

739. T. Zwinger et al.: Photometry of SS433 and its Implication on the Nature of the System. *Astronomy and Astrophysics*.

740. P. Bouchet et al.: The Bolometric Light Curve of SN 1987A. II. Results from Visible and Infrared Spectrophotometry. *Astronomy and Astrophysics*.

741. H.E. Schwarz: Discovery of a Nebula Around AS201. *Astronomy and Astrophysics*.

742. M. Capaccioli et al.: Empirical Correlations Between Globular Cluster Parameters and Mass Function Morphology. *Astronomy and Astrophysics*.

Technical Preprint

26. L. Noethe: Use of Minimum Energy Modes for Modal Active Optics Corrections of Thin Meniscus Mirrors. *Journal of Modern Optics*.

Cooperation in Astronomy in the New Europe

Report on a Panel Discussion at the XII ERAM in Davos¹.

The initial interest for a discussion on this theme was much stimulated by the exceptional attendance from Eastern Europe. Clearly, the frame of this discussion was shaped by the opportunities offered by the new situation in the East, as well as by the increasing interest of the European Community in fundamental science, mobility and University programmes. Free circulation of people has now been achieved over nearly all of Europe (although some visa limitations still remain in force); English has emerged as a common language in astronomy, and while "all astronomers

are born equal", it is only now that equal opportunities progressively become a reality. It is the responsibility of the astronomical community to recognize its privileged life and to optimize the use of its costly resources in the most efficient manner, taking into account not only scientific, but also economic aspects. In the USSR, the difficulties related to the non-convertibility of currency creates problems, also for remote observatories, but the number of new projects (Radio-Astron, X- and Gamma-ray, 1.7-m EUV Telescope), which are open to international collaboration, should offer new opportunities.

The *mobility of people* is first addressed as a key issue in the construction of the new Europe. G. Setti underlines the existence of exchange programmes at the post-doctoral level, most often bilateral, sometimes within international agencies (ESA, ESO). He pleads for a vigorous extension of these

programmes, suggesting a goal for the astronomical community of 200 fellows per year, with a price tag of about 10 MDM/year. The most likely agent for a corresponding action is the European Community, which currently discusses its new Science programme (and especially the Line 6 – Human Resources and Mobility). One could envisage that Societies as the newly founded EAS may become partners of the EEC for such action, in order to reduce bureaucratic overloads. Exchanges must be balanced within Europe. To further this goal, it is suggested to create a limited number of focal points in Eastern Europe, which could channel the international exchanges. Reference is made to the virtue of a broad post-doc programme in the United States, since no tenured position is achieved without some exposure to mobility and to a context distinct from the one where the PhD was prepared.

¹ The Panel members were: A. Boksenberg (Cambridge), A. Boyarchuk (Moscow), P. Léna (Paris), R. Lüst (ESA), G. Setti (Bologna), J. Smak (Warsaw), R. West (ESO), F. Sanchez (Tenerife) and P.O. Lindblad (Stockholm) were unable to attend. In this short summary, opinions or comments are not necessarily referred to their actual author. The Chairman (P. Léna) takes the responsibility for his summary of the discussions, including remarks from the audience.