

Subject Index

General

Proceedings of the international meeting on star clusters, (Guest Editors : *A.K. Pandey & B. Kumar*), 27

Editorial, 31

Preface, (*by R.D. Cannon*), 33

Aryabhata Research Institute of Observational Sciences : reincarnation of a 50 year old State Observatory of Nainital, (*Ram Sagar*), 37

The Uttar Pradesh State Observatory – some recollections and some history (1954 – 1982), (*S.D. Sinval*), 65

Erratum : Jamshid Ghanbhari, Mohsen Shadmehri and Fatemeh Salehi : The non-linear theory of a warped accretion disc with the beta-viscosity prescription, (BASI, 2005, **33**, 447-472), 163

Erratum : K. Acharyya and Sandip K. Chakrabarti : Recombination efficiency of molecular hydrogen on interstellar grains and its effect on production of H_2 , (BASI, 2005, **33**, 473-485), 164

The other backgrounds, (*Virginia Trimble*), 167

Obituary : Arvind Bhatnagar, (*by Ashok Ambastha*), i

Highlights from the observatories, (*Compiled by D.J. Saikia*), 413

Society matters, 165, 313, 433

Physical Data and Processes

Anomalous absorption in H_2CO molecule, (*Suresh Chandra, P.G. Musrif & S.V. Shinde*), 11

Astrophysical molecule CN : vibronic transition probability parameters, (*B. Karthikeyan, K. Balachandra Kumar, N. Rajamanickam & S.P. Bagare*), 203

Recombination efficiency of molecular hydrogen on interstellar grains – II. A numerical study, (*Sandip K. Chakrabarti, Ankan Das, Kinsuk Acharyya & Sonali Chakrabarti*), 299

Celestial Mechanics

- Periodic orbits around the collinear libration points in the restricted three body problem when the smaller primary is a triaxial rigid body : Sun-Earth case, (*Sanjay Jain, Ajay Kumar & K.B. Bhatnagar*), 211
- Stationary solutions and their stability in the magnetic-binary problem when the bigger primary is a triaxial rigid body, (*Harshita Jain, I.Q. Iqbal, Z.A. Taqvi & K.B. Bhatnagar*), 255
- Non-linear stability of L_4 in the restricted three body problem for radiated axes symmetric primaries with resonances, (*Rajiv Aggarwal, Z.A. Taqvi & Iqbal Ahmad*), 327

The Sun and Solar System

- Occultation of 2UCAC 42376428 by (423) Diotima on 2005 March 06, (*R. Vasundhara, K. Kuppaswamy, S. Ramamoorthy, C. Velu & A.K. Venkataramana*), 21
- Multi-observatory observations of night-side of Venus at 2.3 micron – atmospheric circulation from tracking of cloud features, (*Sanjay Limaye, Johan Warell, Bhuwan C. Bhatt, Patrick M. Fry & Eliot F. Young*), 189
- Visual observations of Geminid meteor shower 2004, (*K. Chenna Reddy, D.V. Phani Kumar & G. Yellaiah*), 225
- Spectrophotometric study of the comet C/2001 Q4 (NEAT), (*Mahendra Singh, B.B. Sanwal & Brijesh Kumar*), 273
- MST radar observations of Perseid meteor shower 2004, (*D. Venkata Phani Kumar, K. Chenna Reddy & G. Yellaiah*), 281
- Photometry of Karin family asteroids, (*G. Hahn, S. Mottola, A.K. Sen, A.W. Harris, E. Kührt & M. Mueller*), 393

Stars

- Broadband radio spectrum of SS433, (*Sabyasachi Pal, Sandip K. Chakrabarti, Alex Kraus & Samir Mandal*), 1
- Star formation associated with H II regions, (*Katsuo Ogura*), 111
- Luminosity functions of YSO clusters in Sh-2 255, W3 main and NGC 7538 star forming regions, (*Devendra Ojha, Motohide Tamura & SIRIUS Team*), 119

- The Hipparcos mission and galactic open clusters, (*A.E. Piskunov, N.V. Kharchenko, S. Röser, E. Schilbach & R.-D. Scholz*), 129
- Probing stellar evolution with open star clusters, (*Jasonjot Singh Kalirai*), 141
- Open cluster remnants : an observational overview, (*Giovanni Carraro*), 153
- Primordial enrichment and nitrogen abundance inhomogeneities in globular clusters, (*Graeme H. Smith*), 235
- Star formation in the region of young open cluster- NGC 225, (*Annapurni Subramaniam, Blesson Mathew & Sreeja S. Kartha*), 315
- Mass function of open clusters NGC 1857 and Czernik 25, (*S. Sujatha, G.S.D. Babu & Sharath Ananthamurthy*), 357
- On the progenitor of supernova 1987A, (*M. Parthasarathy, David Branch, E. Baron & David J. Jeffery*), 385

Interstellar Medium

- Recombination efficiency of molecular hydrogen on interstellar grains – II. A numerical study, (*Sandip K.Chakrabarti, Ankan Das, Kinsuk Acharyya & Sonali Chakrabarti*), 299

Galaxies

- Some remarks on extragalactic globular clusters, (*Tom Richtler*), 83
- Star clusters in late-type galaxies, (*Myung Gyoon Lee*), 99
- Deep *J*-band imaging of high redshift QSO candidates with the Himalayan Chandra Telescope, (*Tomotsugu Goto & Devendra Ojha*), 291
- Giant Metrewave Radio Telescope limits on cool HI in galaxy groups, (*D.A. Green, M.S. Clemens, P. Alexander, H. Cullen & B. Nikolic*), 375

Instrumentation

- A software baseband receiver for pulsar astronomy at GMRT (*B.C. Joshi & Sunil Ramakrishna*), 401