STELLAR CLUSTERS AND ASSOCIATIONS:
CONVECTION, ROTATION, AND DYNAMOS

Mondello (Palermo), 25-28 May 1999

Scientific Programme

I) STELLAR STRUCTURE AND EVOLUTION
(Tuesday morning May 25)

08:30 - 09:00 Registration and Poster Set-up

09:00 - 09:15 Welcome Address

09:15 - 09:45 Evolutionary models for high-mass stars **G. Meynet** (invited)

09:45 - 10:00 Old open clusters as tracers of galactic evolution **A. Bragaglia**

10:00 - 10:30 Convection and light elements evolution from pre-main sequence to the upper AGB **F. D'Antona** (invited)

10:30 - 10:45 Observed and theoretical luminosity functions of young open clusters: NGC 6611 **A. Belikov**

10:45 - 11:45 Coffee break

11:45 - 12:15 Mixing processes in stellar interiors **S. Vauclair** (invited)

12:15 - 12:30 The Mass Function of the Pleiades **S.T. Hodgkin**

12:30 - 13:00 Implications of helioseismology for stellar structure and evolution **J. Christensen-Dalsgaard** (invited)

II) CLUSTER DISTANCES AND AGES
(Tuesday afternoon May 25)

15:00 - 15:30 Parallaxes for open clusters using the Hipparcos intermediate astrometric data **F. van Leeuwen** (invited)

15:30 - 15:45 Do Hipparcos distances to open clusters really disagree with the HR diagram? **N. Robichon**

15:45 - 16:00 The distance to the Pleiades revisited **D. Valls-Gabaud**

16:00 - 16:30 A critical assessment of Hipparcos distances **M. Pinsonneault** (invited)

16:30 - 17:30 Coffee break

17:30 - 18:00 Relative and absolute age determination of open clusters **J.-C. Mermilliod** (invited)

18:00 - 18:15 The low-mass stellar content of Scorpius OB2 as seen by Hipparcos **J.H.J. de Bruijne**

18:15 - 18:45 Theoretical evolutionary models **G. Bertelli** (invited)

18:45 - 19:00 A global view of activity in T Tauri stars **M.T. Lago**

III) IMFs, MASS SEGREGATION AND CLUSTER EVOLUTION (Wednesday morning May 26)

09:00 - 09:30 IMFs in star forming regions and the origin of field stars **H. Zinnecker** (invited)

09:30 - 09:45 Investigating the process of star formation in young LMC star clusters **R.A. Johnson**

09:45 - 10:15 Cluster IMFs and mass segregation: dynamical effects **R. de la Fuente Marcos** (invited)

10:15 - 10:30 The onset of cluster formation around intermediate mass stars **L. Testi**

10:30 - 11:00 Coffee break

11:00 - 11:30 Early evolution of stellar clusters **I. Bonnell** (invited)

11:30 - 11:45 Wide binaries in the Orion nebula cluster **A. Scally**

11:45 - 12:00 The history of low-mass star formation in the Upper Scorpius OB association **T. Preibisch**

12:00 - 12:30 Dynamical evolution of intermediate-age clusters **J. Andersen** (invited)

IV) FREE AFTERNOON (Wednesday afternoon May 26).

Excursion to the ruins of the Greek city of Selinunte.

V) LITHIUM ABUNDANCES AND METALLICITIES
(Thursday morning May 27)

09:00 - 09:30 Determination of elemental abundances **R. Gratton** (invited)

09:30 - 10:00 Lithium and beryllium as diagnostics of internal processes **C. Deliyannis** (invited)

10:00 - 10:30 Lithium depletion in clusters **R.D. Jeffries** (invited)

10:30 - 11:30 Coffee Break

11:30 - 12:00 Dating young clusters with the lithium test **J. Stauffer** (invited)

12:00 - 12:15 A lithium age for the young cluster IC2391 **D. Barrado**

12:15 - 12:30 Formation of visible spectra of L-dwarfs **Ya.V. Pavlenko**

12:30 - 13:00 Optical spectroscopy of open clusters **A.K. Dupree** (invited)

VI) ROTATION AND ANGULAR MOMENTUM EVOLUTION
(Thursday afternoon May 27)

15:00 - 15:30 Circumstellar disks and PMS rotation: examining disk-regulated stellar rotation **K.G. Stassun** (invited)

15:30 - 16:00 Rotation of cluster stars **S.A. Barnes** (invited)

16:00 - 16:15 Rotation-induced lithium depletion of solar-type stars in young stellar clusters **G. Rüdiger**

16:15 - 16:30 Orbital period modulation and hydromagnetic dynamo action in active binaries **A.F. Lanza**

16:30 - 17:00 Angular momentum evolution **K. MacGregor** (invited)

18:00 - 24:00 Closing dinner at Conte Federico Palace in old Palermo

VII) MAGNETIC FIELDS AND STELLAR ACTIVITY
(Friday morning May 28)

09:00 - 09:30 Measurements of stellar magnetic fields **C. Johns-Krull** (invited)

09:30 - 10:00 Dynamo mechanisms **A. Brandenburg** (invited)

10:00 - 10:30 Magnetic activity phenomena on stars: from the photosphere up to transition region layers **M. Rodonò** (invited)

10:30 - 11:00 Coffee break

11:00 - 11:15 Polar activity: a natural explanation for stellar spindown saturation **D.L. Buzasi**

11:15 - 11:30 Chromospheric emission and angular momentum evolution in G-K giants and supergiants **L. Pasquini**

11:30 - 12:00 Coronal activity among open cluster stars **S. Randich** (invited)

12:00 - 12:15 An HRI survey of NGC 2264: properties of X-ray emission and IMF determination **E. Flaccomio**

12:15 - 12:30 Accretion structures of DR Tau **K. Smith**

12:30 - 13:00 X-rays from old open clusters **F. Verbunt** (invited)

VIII) NEW TECHNOLOGIES/LARGE-SCALE PROGRAMS
(Friday afternoon May 28)

15:00 - 15:15 New instrumentation for stellar study at ESO **L. Pasquini**

15:15 - 15:30 Wide field astronomy instruments on UK telescopes **R.D. Jeffries**

15:30 - 15:45 New optical/IR instrumental programmes in the US **J. Stauffer**

15:45 - 16:00 Community contribution and feedback to the open cluster database **J.-C. Mermilliod**

16:00 - 16:30 The WIYN open cluster study **R.D. Mathieu** (invited)

16:30 - 17:00 Coffee Break

17:00 - 17:30 Future X-ray missions **J.H.M.M. Schmitt** (invited)

17:30 - 17:45 Galactic X-ray surveys **S. Sciortino**

17:45 - 18:15 The impact of the GAIA mission on open cluster research **F. Favata** (invited)

18:15 - 18:30 Prospects for large european collaborative programmes on open clusters **R. Pallavicini**

18:30 - 19:00 Summary talk and closing of the meeting **J. Linsky**