

CONSTELLATION SCHOOL ON
*X-RAYS FROM STAR FORMING
REGIONS*

Palermo, 18-22 May 2009



PALERMO
18-22 May 2009

SCIENTIFIC PROGRAM

Monday - May 18

Introductory session

Chair: Bruno Sacco

9:15 9:30 Giusi Micela

Welcome

9:30 9:45 Thierry Montmerle

Roberto Pallavicini commemoration

9:45 10:15 Salvatore Sciortino

X-ray Astronomy: a quick tour from the early days to the present and ... beyond

10:15 10:40 Break

10:40 12:00 Giovanni Peres

Thermal X-ray emission from forming stars

12:00 13:00 Jurgen Schmitt

Stellar X-ray astronomy: The last 30 years

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Instruments and data structure

Chair: Thierry Montmerle

- 14:30 15:30 Marco Barbera
X-ray Telescopes
- 15:30 16:00 Alfonso Collura
X-ray Detectors I
- 16:00 16:30 Break
- 16:30 17:00 Alfonso Collura
X-ray Detectors II
- 17:00 17:45 Antonio Maggio
Data Products

Tuesday - May 19

Low Mass Stars

Chair: Anthony Whitworth

- 9:15 10:15 Eric Feigelson
X-rays from pre-main sequence stars
- 10:15 10:45 Francesco Damiani
X-rays and stellar populations
- 10:45 11:10 Break
- 11:10 12:10 Moira Jardine
Magnetic properties of young stars
- 12:10 12:40 Eric Feigelson
X-rays, Protoplanetary Disks and Planet Formation
- 12:40 13:10 Cesare Cecchi Pestellini
The interaction of stellar high energy radiation with hydrogen rich planetary atmospheres

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15:00 18:00 Visit to lab

Wednesday - May 20

Chair: Eric Feigelson

Data Analysis & Student contributions

- 9:15 9:25 Catia Cardoso
Epsilon Indi Ba, Bb: dynamical masses for the nearest brown dwarf binary
- 9:25 9:35 Catarina Alves de Oliveira, Jerome Bouvier, Estelle Moraux
Probing the low-mass end of the IMF in the Rho Ophiuchus Molecular Cloud
- 9:35 9:45 Rachel Curran, Costanza Argiroffi, Germano Sacco, Salvatore Orlando, Fabio Reale, Giovanni Peres, Antonio Maggio
Multi-wavelength diagnostics of accretion in an X-ray selected sample of CTTSs.
- 9:45 9:55 Ella Hopewell
Automated spectral classification of pre-main sequence stars in NGC 6530

9:55 10:05 Sara Bonito
Observations and modeling of X-ray emission from protostellar jets
10:05 10:15 Germano Sacco
Modeling of the accretion shock on CTTSs and its X-ray emission
10:15 11:00 Francesco Damiani
X-ray image analysis
11:00 11:30 Break
11:30 12:15 Antonio Maggio
Spectral and variability analysis
12:15 12:45 Antonio Maggio
Presentation of data analysis session

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14:15 18:00
Data analysis session

Thursday – May 21

Massive Stars and Diffuse Emission

Chair: Hans Zinnecker

9:15 10:15 Thierry Montmerle
X-rays from massive stars
10:15 11:15 Eric Feigelson
X-ray Insights into Young Stellar Clusters
11:15 11:40 Break
11:40 12:40 Thierry Montmerle
Shock physics and X-ray diagnostics in the Star Formation regions
12:40 12:50 Ana Lopez Sepulcre
Molecular outflows towards O-type young stellar objects
12:50 13:00 Arabela de la Nuez Cruz
Massive stars in embedded HII regions
13:00 13:10 Evelyne Alecian
Magnetism in Herbig Ae/Be stars

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14:45 18:30
Data analysis session

Friday - May 22

Conclusions

9:15 10:30 Fabio Favata
Open questions and the future
10:30 11:00 Break
11:00 13:00 Reports from the students