Gamma-ray Bursts : Prompt to Afterglow

The National Centre for Radio Astrophysics (NCRA-TIFR)

Tata Institute of Fundamental Research
Pune, India

July 4-7, 2017

Venue: NCRA Auditorium

Duration of the talk includes 5 minutes for discussion
All the meals will be provided starting dinner on 3rd July upto breakfast on 8th July.

Day 1	July 4, 2017 (Tuesday)
08:30-09:30	**Breakfast and registration**
09:30-10:00	*Inauguration, welcome speech by Director*
	I - GRB Prompt Emission Chair: Pawan Kumar
10:00 – 11:00	*Jonathan Granot: The Physics of GRB prompt emission*
11:00-11:30	**Tea**
11:30 - 12:30	*Dipankar Bhattacharya: Hard X-ray polarisation in GRBs*
12:30-13:00	*Rupal Basak : Multi-wavelength study of GRB spectral evolution (Skype)*
13:00 - 14:30	**Lunch**
	II- GRB Prompt Emission Chair: A.R.Rao
14:30 – 15:30	*Jonathan Granot : Prompt emission: Fermi and Swift spectral data*
15:30 - 16:00	*Vikas Chand : Deciphering the GRBs with spectral, timing and polarization measurements*
16:00 - 16:30	**Tea**
	III - GRBs as tools Chair: A. R. Rao
16:30 - 17:00	*Patrick Dasgupta: On the possible common progenitor for FRBs and long GRBs*
17:00-17:30	*Shashikant Gupta : Cosmology with long GRBs: non-Gaussian features in the data.*
17:30-18:00	*Shantanu Desai : Testing GR from line-of sight Shapiro delay using multi-messenger signals from GRBs*
19:30-20:30	**Dinner**

Day 2	July 5, 2017 (Wednesday)
08:30 - 09:30	**Breakfast**
	IV - Afterglow (09:30 – 11:00) Chair: Shashi Bhushan
09:30 – 10:30	*Pawan Kumar: The Physics of GRB afterglow emission*
10:30 - 11:00	*Dipankar Bhattacharya - Hard energy electron distribution in GRB afterglows*
11:00 - 11:30	**Tea**
	V - Understanding the afterglows (11:30 – 13:00) Chair: Shashi Bhushan
11:30 – 12:00	*Resmi Lekshmi: Forward shock, Reverse shock and multi waveband modelling (Skype)*
12:00 - 12:30	*Poonam Chandra : Low frequency afterglows of GRBs*
12:30 - 13:00	*Kuntal Misra : Optical afterglows of GRBs*
13:00 - 14:30	**Lunch**
	VI - X-ray Observations (14:30 – 15:30) Chair: Kuntal
14:30 – 14:50	*A.R. Rao: AstroSat CZT Imager instrument as a GRB Monitor*
14:50 - 15:10	*Vidushi Sharma : CZTl observations of GRBs*
15:10 - 15:30	*Debdutta Paul : Luminosity function of long Gamma Ray Bursts*
15:30 - 16:00	***Tea***
16:00 – 17:00	***Pawan Kumar: NCRA Seminar: Exploring the progenitors of long GRBs***
19:00-20:30	**Workshop Dinner**

Day 3	July 6, 2017 (Thursday)
07:00-09:00	***TRAVEL TO GMRT***
09:00-10:00	**Breakfast**
10:00-11:30	*Visit to GMRT*
	VII – Observations- Optical Afterglow Chair: Dipankar
11:30 – 12:15	*Shashi Bhushan Pandey : Study of gamma-ray bursts with the 3.6m Devasthal Optical Telescope.*
12:15 - 13:00	*Varun Bhalerao: Rapid follow up of high energy transients*
13:00 - 14:30	***Group photo and Lunch***
	VIII – GMRT and radio afterglow data analysis Chair: Poonam
14:30 – 15:15	*Yashwant Gupta: Overview of GMRT*
15:15 – 15:45	*Sanjay Kudale: GMRT pipeline for transient data analysis*
15:45 – 16:15	***Tea***
16:15-18:30	***Travel back to Pune***
19:30-20:30	***Dinner***

Day 4	July 7, 2017 (Friday)
05:45-09:00	***Morning Trek to Sinhagad***
8:30-10:00	***Breakfast***
	IX – AstroSat : CZT Imager Chair: : Varun
10:30 - 11:00	*S.V. Vadawale: Polarisation measurements using AstroSat CZTI (Skype)*
11:00 -11:15	*Aarthy Essakiappan : GRB Polarization using CZTI*
11:15 - 11:45	***Tea***
11:45 - 12:15	*Tanmoy Chattopadhyay: Measurements of GRB prompt emission polarization with AstroSat-CZTI (Skype)*
12:15 - 12:30	*Ajay Vibhute : Machine learning technique to search GRB in Astrosat CZTI*
12:30 - 12:45	*Sujay Mate : Mass Model of AstroSat and Transient Detection with CZTI*
12:45 - 14:00	***Lunch***
14:00 - 15:30	***Panel Discussion (Jonathan, Pawan, Rao, Dipankar, Poonam)***
15:30 – 16:00	***Tea***
16:00	***Workshop Ends***