Gamma-Ray Bursts in the Multi-Messenger Era

Paris, 16-19 June 2014

Program

Wednesday, June 18th 2014 - Logistical information

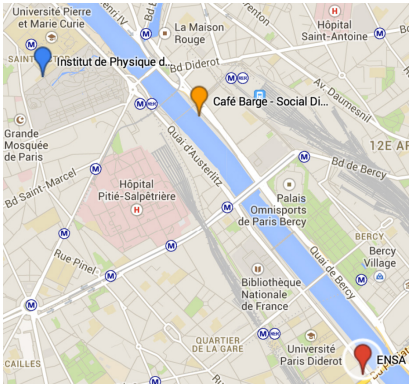
École nationale supérieure d'architecture de Paris-Val de Seine

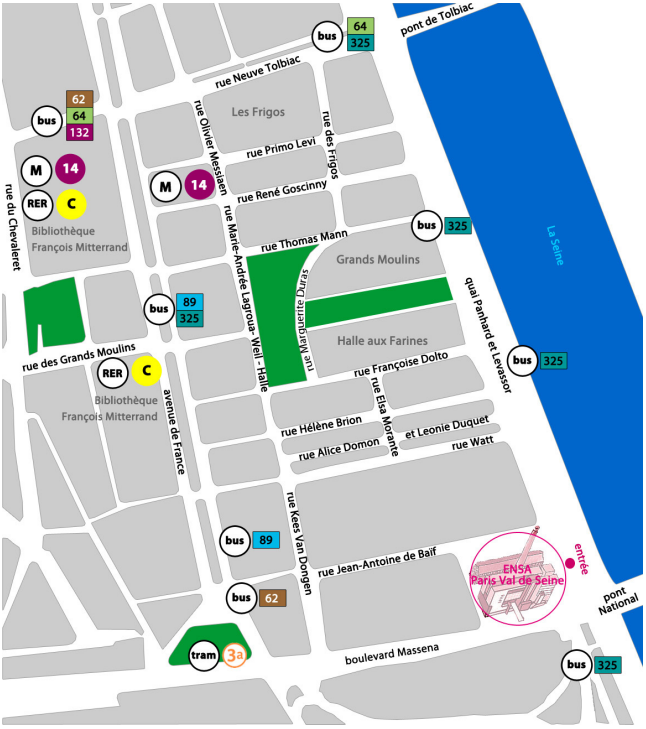
3 Quai Panhard et Levassor, 75013 Paris
Subway access: ligne 14, RER C - Bibliothèque François Mitterrand
Tram: T3a - Avenue de France
www.paris-valdeseine.archi.fr/ecole/plan.php

On wednesday the GRB workshop will take place exceptionally at the « ENSA Paris Val de Seine ».

While located in Paris, this site is not exactly at walking distance from the IPGP where the workshop will take place the other days (3.2 km, 40 min on foot).
We strongly suggest the use of the Paris public transport system (www.ratp.fr) to find the best solution to reach this conference site from your hotel.

The right map shows in blue the « IPGP » site and in red the « ENSA Paris Val de Seine » site. The map below shows a detailed plan of the ENSA Paris Val de Seine surroundings including the main public transports stations.





Labex UnivEarthS

Gamma-Ray Bursts in the Multi-messenger Era

Paris

Monday, June 16th

09:30 – 10:30	Registration
10:30 – 11:00	Coffee Break
11:00 – 11:15	Welcome (IPGP/LOC/SOC)
11:15 – 12:00	**N. Gehrels: GRB prompt and afterglow observations**
12:00 – 12:20	F. Piron: Fermi-LAT observations of GRB 130427A
12:20 – 12:40	V. Heussaff: GRBs luminosity indicators from the prompt emission
12:40 – 14:00	Lunch Break
14:00 – 14:45	**R. Mochkovitch: Theory of prompt and afterglow emission**
14:45 – 15:05	Y. Urata: Off-Axis Orphan GRB Afterglow Searches with SUBARU/Hyper-Suprime-Cam
15:05 – 15:25	B. B. Zhang: How Long Does a Burst Burst?
15:25 – 15:45	J. Graham: The Metal Aversion of LGRBs
15:45 – 16:15	Coffee Break
16:15 – 16:35	A. Volnova: Optically Dark Gamma-Ray Bursts
16:35 – 16:55	J. Racusin: ISS-Lobster: A Future Observatory for the Multi-Messenger Era
16:55 – 17:15	*B. Cordier: The Chinese-French SVOM mission for Gamma-Ray Burst studies*
17:15 – 17:35	*J. Wei: Ground Based Wide Angle Camera: an instrument for short-time-scale optical transients*
18:00 -	Welcome Cocktail at IPGP

Legend: **Invited Talk**; *Solicited Talk*

- GRB prompt and afterglow emission
- Progenitors
- Neutrinos
- GW
- Particle acceleration & UHECR
- Radiation Mechanisms
- GRB Science with future experiments

Labex UnivEarthS

Gamma-Ray Bursts in the Multi-messenger Era

Paris

Tuesday, June 17th

09:00 – 09:45	**M. Lemoine: Particle Acceleration Mechanisms**
09:45 – 10:05	D. Allard: Acceleration of UHECR at GRB internal shocks
10:05 – 10:25	M. Bustamante: Improved ultra-high energy cosmic ray and neutrino predictions from gamma-ray bursts
10:25 – 10:55	Coffee Break
10:55 – 11:40	**S. Inoue: GRBs and UHECRs**
11:40 – 12:00	O. Bromberg: Getting a handle on the nature of long GRB jets
12:00 – 12:20	K. Nishikawa: Radiation from accelerated particles in relativistic jets with shocks, shear-flow, and reconnection
12:20 – 12:40	X. Wang: How bad is the external shock afterglow model for gamma-ray bursts?
12:40 – 14:00	Lunch Break
14:00 – 14:45	**B. Zhang: GRB radiation processes**
14:45 – 15:05	S. Guiriec: A New Model for GRB Prompt Emission
15:05 – 15:25	Y. Suwa: Gravitational Waves and Neutrinos from Central Engine of Gamma-Ray Bursts
15:25 – 15:45	L. Nava: Clustering of LAT light curves: a clue to the origin of the high-energy emission in GRBs
15:45 – 16:15	Coffee Break
16:15 – 16:35	*L. Piro: ATHENA and GRBs*
16:35 – 16:55	*I. Lhenry-Yvon: The Large High Altitude Air Shower Observatory in the landscape of GRBs*
16:55 – 17:15	*G. Ghirlanda: GRBs and SKA*
17:15 – 17:35	I. Bartos: CTA is Well Suited to Follow Up Gravitational Wave Transients

Labex UnivEarthS

Gamma-Ray Bursts in the Multi-messenger Era

Paris

Wednesday, June 18th

09:00 – 09:45	**K. Murase: Neutrino production during GRB prompt emission**
09:45 – 10:05	M. Petropoulou: The effect of leptohadronic feedback processes on high-energy signatures from GRBs
10:05 – 10:25	N. Fraija: GRB110731A: Early afterglow in stellar wind powered by a magnetized outflow
10:25 – 10:55	Coffee Break
10:55 – 11:15	H. Yu: Synchrotron Cooling in Hard and Bright Gamma-Ray Bursts Observed by the Fermi Gamma-Ray Burst Monitor
11:15 – 11:35	S. Shibata: Monte Carlo simulations for thermal radiation from GRB jet
11:35 – 12:20	**A. Kouchner: Neutrino Detection Techniques**
12:20 – 12:40	J. Schmid: Searches for Neutrinos from Gamma-Ray Bursts with the ANTARES Neutrino Telescope
12:45 – 14:00	Lunch Break
14:00 – 14:45	**I. Taboada: High Energy Neutrinos and GRBs**
14:45 – 15:05	A. Mathieu: Follow-up of high energy neutrinos detected by the ANTARES telescope
15:05 – 15:25	T. Pradier: Searches for coincident High Energy Neutrinos and Gravitational Wave Bursts using the ANTARES and Virgo/LIGO detectors
15:25 – 15:45	Theme Discussion lead by B. Baret
15:45 – 16:15	Coffee Break
16:15 – 17:00	**B. Metzger: Long GRB Progenitors**
17:00 – 17:20	M.G. Bernardini: How to switch on and off a GRB through a magnetar
17:20 – 17:40	*P. O'Brien: GRBs with CTA*
19:00	Social Dinner at Café Barge

Labex UnivEarthS

Gamma-Ray Bursts in the Multi-messenger Era

Paris

Thursday, June 19th

09:00 – 09:45	**R. Perna: Short GRB Progenitors**
09:45 – 10:05	B. Giacomazzo: Compact Binary Progenitors of Short Gamma-Ray Bursts
10:05 – 10:25	H. Nagakura: Jet propagation and its collimation in the ejecta of double neutron star merger
10:25 – 10:55	Coffee Break
10:55 – 11:15	R. Ciolfi: Magnetically driven winds from differentially rotating neutron stars and X-ray afterglows of short gamma-ray bursts
11:15 – 12:00	**P. Hello: Gravitational waves detection techniques**
12:00 – 12:20	N. Christensen: High-energy offline electromagnetic follow-up of LIGO-Virgo gravitational-wave binary coalescence candidate events
12:20 – 12:40	F. Pannarale: Prospects for joint gravitational wave and electromagnetic observations of neutron star black hole coalescing binaries
12:40 – 14:00	Lunch Break
14:00 – 14:45	**S. Fairhurst: GRBs as sources of Gravitational Waves**
14:45 – 15:05	G. Greco: Signatures of inner-engine dynamics revealed by advanced singular spectrum analysis of gamma-ray bursts
15:05 – 15:25	V. Pelassa: Short GRB from compact mergers, the role of Fermi GBM in the identification of advanced LIGO/Virgo detections
15:25 – 15:45	Theme Discussion lead by N. Leroy
15:45 – 16:15	Coffee Break
16:15 – 16:30	Conclusions

Labex UnivEarthS

Gamma-Ray Bursts in the Multi-messenger Era

Paris

Posters

1. D. Siegel	Magnetorotational instability in hypermassive neutron stars
2. R. Nemiroff	Limits on Lorentz Violations and Cosmological Dispersion from GRBs
3. A. Mastichiadis	GRB temporal variability in the context of the one-zone hadronic model
4. N. Tominaga	Development of a multidimensional relativistic radiative transfer code
5. A. Ishii	Radiative transfer analysis across an ultra-relativistic shock in different inertial frames
6. D. Begue	Towards the determination of the outflow properties from the photospheric emission
7. P. Minaev	Spectral evolution and pulse decomposition of Gamma-ray Burst light curves
8. D. Fargion	Gamma Ray Burst by thin persistent precessing jets blazing in an apparent evolution around us
9. H. Dereli	What are the Under Luminous GRBs?
10. Y. Yu	Fall back accretion and energy injections in the ultra-long GRB 111209A
11. Y. Urata	Synchrotron self-inverse Compton radiation from reverse shock on GRB120326A
12. H. Zitouni	Statistical Study of Observed and Intrinsic Durations among BATSE and Swift GRBs
13. N. Fraija	Resonant oscillations of GeV - TeV neutrinos caused by internal shocks in GRBs
14. A. Jung	Photo-Detector Module electronics for UFFO pathfinder and EUSO
15. J. Ripa	Testing of Performance of UFFO Burst Alert & Trigger Telescope
16. J. Ripa	A curious mathematical method for the calculation of the luminosity distance for the flat cosmological model using the elliptic integral of the first kind
17. F. Daigne	The physical origin of the prompt GRB emission: the case of GRB 130427A
18. V. Predoi	Search for gravitational waves associated with gamma-ray bursts detected by the InterPlanetary Network
19. S. Prianomonte	Electromagnetic follow-up of gravitational wave candidates: perspectives in INAF
20. Z. Bosnjak	INTEGRAL observations of GRBs : spectral properties and investigation of the emission on long time scales
21. G. Pizzichini	Search for properties of Gamma-Ray Bursts at high redshift
22. E. Burns	Investigations into the Spectral and Temporal Behavior of Short GRBs Using Multiple Instruments
23. E. Zaninoni	Gamma-ray burst optical light-curve zoo : comparison with X-ray observations
24. E. Zaninoni	The Induced Gravitational Collapse and the Binary Driven Hypernovae
25. V. Tichy	NANOX – Proposed Nano-Satellite X-ray Mission

Labex UnivEarthS


50
周年
中国 FRANCE
CHINE 法国
LabEx UnivEarthS
www.GRBParis2014.fr
INSTITUT FRANÇAIS
PARIS DIDEROT
cea
GDRE Probing the Dawn of the Universe with Gamma-Ray Bursts
AIM
OCEVU
cnes
cnrs