Scientific program "Galaxies meet GRBs at Cabo de Gata"

Final version

Sunday, Sept. 22

19:00 - 20:30 Registration Cala Grande Lobby

Monday, Sept. 23

- 8:30 09:15 Registration (Cala Grande Lobby)
- 09:15 09:30 C. Thöne: Welcome and introduction to the science of the conference
- 09:30 09:40 A. de Ugarte Postigo: Presentation of Cabo de Gata

Session: Massive stars and SN/GRB progenitors, chair: O. Hartoog

- 09:40 10:10 C. Fryer (I): Progenitors of SNe and GRBs
- 10:10 10:30 L. Lopez: What would the remnant of a GRB look like?
- 10:30 10:50 C. Swenson: UV/optical and X-ray flares in GRB lightcurves
- 10:50 11:10 M. Friis: Thermal emission in the early X-ray afterglows of GRBs
 - Coffee break: 11:10 11:40 —
- 11:40 12:00 I. Negueruela: How should the progenitors of IIp-SNe look like?
- 12:00 12:20 G. Montes: Understanding the X-ray emission of close massive binaries: The case WR 20A
- 12:20 12:40 M. Rubio Díez: VFTS 682: an isolated twin of R136's WN5h core stars

— Lunch & Beach 12:40 - 16:00 —

Chair: A. Cucchiara

- 16:00-16:20 J. Groh: The surprising look of SN and GRB progenitors from stellar evolution models
- 16:20 16:40 A. Volnova: The optical light curve of the GRB 130427A and SN evidence
- 16:40-16:50 P. Minaev: To the dichotomy of short gamma-ray bursts
- 16:50 17:00 A. Pozanenko: Testing a two-jet model of short GRBs
 - Coffee break: 17:00 17:30 —

Session: Observations and instruments

- 17:30 18:00 M. Roth (I): 3D spectroscopy of massive stars, SNe, and other point sources in crowded fields
- 18:00-18:20 D. Götz: Catching the first stars with SVOM
- 18:20 18:40 A. Cabrera-Lavers: GRBs at GTC
- 18:40 19:00 J. Gorosabel: GTC observations of GRB afterglows and their host galaxies

20:00 Welcome Cocktail at the Pool Bar

Tuesday, Sept. 24

Session: From the stars to their environment, Chair: L. Lopez

- 09:20 09:50 P. Crowther (I): Massive stars, SNe and their star-forming regions
- 09:50-10:10 J. Graham: The metal aversion of long GRBs
- 10:10 10:40 M. Mollá (I): Chemical evolution models for spiral and irregular galaxies
- 10:40-11:00 D. Szecsi: Evolution of massive stars in blue compact dwarf galaxies: model tracks, WR stars and final fates
 - Coffee break: 11:00 11:30 —
- 11:30-11:50 M. Garcia: Massive stars in metal-poor environments: One step forward from the SMC
- 11:50 12:20 M. Modjaz (I): SN environments
- 12:20 12:30 J. Selsing: IFS of Ic-BL SNe

— Lunch & Beach 12:30 - 16:00 —

Chair: P. Kelly

- 16:00 16:30 C. Gall (I): Formation and evolution of dust in galaxies
- 16:30 16:50 D. Watson: Origin of soft X-ray absorption in GRB afterglows

Session: Spatially resolved observations of star-forming places

- 16:50-17:10 E. Perez-Montero (I): WR galaxies and the interplay between gas and stars in star-forming systems
- 17:10 17:30 C. Kehrig: IFU spectroscopy of metal-poor WR HII galaxies
 - Coffee break: 17:30 18:00 —
- 18:00-18:30 S. Sanchez: The CALIFA survey: Exploring the evolution of galaxies with HII regions
- 18:30 18:50 R. Garcia-Benito: The radial structure of M/L in CALIFA

19:30 Public outreach event at Cala Grande

Morning off four tours and activities

Chair: R. Garcia Benito

16:30 – 17:00 P. Papaderos (I): Extremely metal poor galaxies

17:00-17:20 D. Miralles: Ionizing stellar population in NGC 3310

17:20-17:40 M. Pakull: $He+ionizing\ radiation\ in\ low\ metallicity\ starbursts$

— Coffee break: 17:40 – 18:10 —

Session: The hosts of stellar explosions

18:10-18:40 G. Leloudas (I): SLSNe and their hosts

18:40-19:00 R. Lunnan: The extreme environments of SLSNe - connections to long GRBs?

20:00 Informal evening discussion at the pool

Thursday, Sept. 26

Chair: M. Friis

- 9:30 10:00 D. Malesani (I): Probing star-forming galaxies at all redshifts via long-duration $GRB\ hosts$
- 10:00-10:20 B. Milvang-Jensen: $Ly\alpha$ emission from GRB hosts based on the TOUGH survey
- 10:20 10:50 A. Cucchiara: Gemini Spectroscopy of the short burst GRB 130603B afterglow and host

— Coffee break: 10:50 – 11:20 —

- 11:20 11:40 J. Elliott: The solar-metallicity host of GRB 110918A
- 11:40 12:00 S. Schulze: 120422A and its connection to high and low-luminosity GRBs
- 12:00 12:20 P. Kelly: Comparsion between the hosts of CC-SNe and low-z GRB hosts

-Lunch & Beach 12:20 - 16:00 -

Session: Star-forming galaxies near and far, chair: B. Milvang-Jensen

- 16:00 16:30 M. Michalowski (I): Sub-mm and radio observations of SF galaxies
- 16:30-17:00 M. Lehnert (I): SF in distant galaxies: setting the stage for the parent population of GRB hosts
- 17:00-17:20 R. Amorin: Extreme emission line galaxies in the local universe and beyond: potential hosts of GRBs
 - (short) coffee break: 17:20 17:40 —
- 17:40 18:10 L. Christensen (I): Properties of strong gravitationally lensed galaxies
- 18:10 18:30 I. Kochiashvili: Interlopers for the z \sim 7 galaxies and their nature

20:00 Bus to the conference dinner at "La Gallineta" in El Pozo de los Frailes

Friday, Sept. 27

Session: Using massive stars and their environment as tracers, chair: R. Amorin

 $10:00-10:30 \quad \hbox{D. Perley (I): } Promises \ and \ Perils for \ Constraining \ the \ Cosmic \ Star-Formation \\ History \ with \ GRBs$

10:30 – 10:50 S. Vergani: Are LGRBs biased tracers of SFR? Clues from a complete sample of z < 1 LGRB hosts

10:50-11:10 O. Hartoog: A double DLA towards a GRB at z=5

— Coffee break: 11:10 – 11:40 —

11:40-12:15 Summary talk: S. Sanchez

12:15-12:45 Final discussion and goodbye