

# Calar Alto 2.2m-Telescope

## Autumn 2019

(Tentative Schedule)

|         |                                     |  |           |  |
|---------|-------------------------------------|--|-----------|--|
| 1. 7.   | 31. 12.<br>#20 2 N<br>Service       | <b>de Ugarte Postigo (Granada)</b><br>IAA-CSIC                                       | CAFOS     | GRB follow-up: Afterglow, supernovae and hosts of massive stellar explosions (GTO)     |
| 1. 7.   | 31. 12.<br>#21 1 N<br>Service       | <b>de Ugarte Postigo (Granada)</b><br>IAA-CSIC                                       | BUSCA     | GRB follow-up: Afterglow, supernovae and hosts of massive stellar explosions (GTO)     |
| 1. 7.   | 31. 12.<br>#22 4 N<br>Service       | <b>Kann (Granada)</b><br>IAA/CSIC  | CAFOS     | Follow-up of Gravitational-Wave Sources at CAHA (GTO)                                  |
| 1. 7.   | 31. 12.<br>#23 1 N<br>Service       | <b>Kann (Granada)</b><br>IAA/CSIC  | BUSCA     | Follow-up of Gravitational-Wave Sources at CAHA (GTO)                                  |
| 1. 7.   | 31. 12.<br>#24 0,5 N<br>Service     | <b>Santos-Sanz (Granada)</b><br>(IAA-CSIC)   | CAFOS     | ToO: Stellar occultations by Dwarf Planets, TNOs and Centaurs                          |
| 1. 7.   | 31. 12.<br>#27 3 N<br>Service       | <b>Castro-Tirado (18080 Granada)</b><br>IAA-CSIC                                     | CAFOS     | CAHA follow-up of gravitational radiation sources in the Multi-messenger Era           |
| 4. 7.   | 5. 7.<br>#25 2 N<br>Visitor         | <b>Comerón (Garching bei München)</b><br>European Southern Observatory               | CAFOS     | A shadows play: unveiling the powering source of HH250                                 |
| 9. 7.   | 10. 7.<br>#7 2 N<br>Service         | <b>Lillo-Box (Villan. Cañada, Madrid)</b><br>CAB-Astrofísica (CSIC-INTA), ESO        | CAFÉ      | Radial velocity confirmation of non-transiting planets from Kepler                     |
|         | 11. 7.<br>#51 1 N<br>Service        | <b>Poppenhaeger</b><br>Leibniz Inst.Astrophysics Potsdam                             | CAFÉ      | The age-rotation-activity relationship of cool stars with asteroseismic ages           |
| 18. 7.  | 21. 7.<br>#14 4 N<br>Visitor        | <b>Sánchez-Lavega (Bilbao)</b><br>Escuela de Ingeniería de Bilbao                    | PlanetCam | Jupiter and Saturn: Support to Juno and survey after Cassini                           |
| 24. 7.  | 26. 7.<br>#6 3 N<br>Service         | <b>Lillo-Box (Villan. Cañada, Madrid)</b><br>CAB-Astrofísica (CSIC-INTA), ESO        | BUSCA     | A trojan sibling for the longest period transiting exoplanet known                     |
| 30. 7.  | 31. 7.<br>#4 2 N<br>Visitor         | <b>Miranda (Granada)</b><br>IAA-CSIC   | CAFÉ      | The structure of dense, compact cores of planetary nebulae                             |
|         | 1. 8.<br>#51 1N<br>Service          | <b>Poppenhaeger</b><br>Leibniz Inst.Astrophysics Potsdam                             | CAFÉ      | The age-rotation-activity relationship of cool stars with asteroseismic ages           |
| 5. 8.   | 7. 8.<br>#7 3 N<br>Service          | <b>Lillo-Box (Villan. Cañada, Madrid)</b><br>CAB-Astrofísica (CSIC-INTA), ESO        | CAFÉ      | Radial velocity confirmation of non-transiting planets from Kepler                     |
| 21. 8.  | 22. 8.<br>#17 2 x 0,25 N<br>Service | <b>Guerrero (18008)</b><br>IAA-CSIC  | CAFÉ      | Understanding the Enigmatic Behaviour of the Helix Central Star                        |
| 21. 8.  | 22. 8.<br>#8 2 x 0,75 N<br>Service  | <b>Barrado (Villanueva de la Canada)</b><br>Centro de Astrobiología (CSIC-INTA)      | CAFÉ      | CHRONOS: a comprehensive stellar age scale (III)                                       |
| 28. 8.  | 29. 8.<br>#17 2 x 0,25 N<br>Service | <b>Guerrero (18008)</b><br>IAA-CSIC  | CAFÉ      | Understanding the Enigmatic Behaviour of the Helix Central Star                        |
| 28. 8.  | 29. 8.<br>#8 2 x 0,75 N<br>Service  | <b>Barrado (Villanueva de la Canada)</b><br>Centro de Astrobiología (CSIC-INTA)      | CAFÉ      | CHRONOS: a comprehensive stellar age scale (III)                                       |
| 3. 9.   | 5. 9.<br>#30 3 N<br>Visitor         | <b>Vioque (Villan. Cañada, Madrid)</b><br>Centro de Astrobiología (CSIC-INTA)        | CAFOS     | New Herbig Ae/Be candidates using Gaia and Machine Learning                            |
| 24. 9.  | 25. 9.<br>#17 2 x 0,25 N<br>Service | <b>Guerrero (18008)</b><br>IAA-CSIC  | CAFÉ      | Understanding the Enigmatic Behaviour of the Helix Central Star                        |
| 24. 9.  | 25. 9.<br>#13 2 x 0,75 N<br>Service | <b>González Hernández (La Laguna,Tfe)</b><br>IAC                                     | CAFÉ      | Spectroscopic follow-up of the very metal-poor stars candidates in the Pristine Survey |
| 1. 10.  | 2. 10.<br>#17 2 x 0,25 N<br>Service | <b>Guerrero (18008)</b><br>IAA-CSIC  | CAFÉ      | Understanding the Enigmatic Behaviour of the Helix Central Star                        |
| 1. 10.  | 2. 10.<br>#13 2 x 0,75 N<br>Service | <b>González Hernández (La Laguna,Tfe)</b><br>IAC                                     | CAFÉ      | Spectroscopic follow-up of the very metal-poor stars candidates in the Pristine Survey |
| 7. 10.  | 10. 10.<br>#15 4 N<br>Visitor       | <b>Hueso (Bilbao)</b><br>Escuela de Ingeniería de Bilbao                             | PlanetCam | High-resolution imaging of Uranus and Neptune  |
| 14. 10. | 16. 10.<br>#3 3 N<br>Visitor        | <b>Maíz Apellániz (Villa. Cañada, Madrid)</b><br>Centro de Astrobiología (CSIC-INTA) | AstraLux  | A Lucky Imaging survey of northern Galactic massive stars                              |

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|---------|-------------------------------|---|-----------------|---|
| 29. 10. | 30. 10.<br>#5 2 N<br>Service  | <b>Lillo-Box (Villan. Cañada, Madrid)</b><br>CAB-Astrofísica (CSIC-INTA), ESO | <b>AstraLux</b> | The CAHA follow-up of TESS planet candidates (GTO)  |
| 4. 11.  | 5. 11.<br>#5 2 N<br>Service   | <b>Lillo-Box (Villan. Cañada, Madrid)</b><br>CAB-Astrofísica (CSIC-INTA), ESO | <b>CAFÉ</b>     | The CAHA follow-up of TESS planet candidates (GTO)  |
| 8. 11.  | 9. 11.<br>#18 2 N<br>Service  | <b>Balaguer-Núñez (Barcelona)</b><br>Universitat Barcelona, ICC-UB, IEEC      | <b>CAFÉ</b>     | OCCASO revisited with Gaia DR2  |
| 19. 11. | 20. 11.<br>#52 2 N<br>Service | <b>Hooton</b><br>Queen's University Belfast                                   | <b>BUSCA</b>    | storms or Systematics? Investigating the changing eclipse depth of ultra-hot Jupiter WASP-12b |
|         | 21. 11.<br>#31 1 N<br>Service | <b>Cordes (Bonn)</b><br>Bonn University                                       | <b>BUSCA</b>    | BUSCA GT  |
| 28. 11. | 29. 11.<br>#53 2 N<br>Service | <b>Blinov</b><br>University of Crete  | <b>CAFOS</b>    | Clarifying nature of VLBI-Gaia coordinates offsets in unresolved AGN                          |
| 3. 12.  | 4. 12.<br>#5 2 N<br>Service   | <b>Lillo-Box (Villan. Cañada, Madrid)</b><br>CAB-Astrofísica (CSIC-INTA), ESO | <b>AstraLux</b> | The CAHA follow-up of TESS planet candidates (GTO)  |
| 13. 12. | 15. 12.<br>#18 3 N<br>Service | <b>Balaguer-Núñez (Barcelona)</b><br>Universitat Barcelona, ICC-UB, IEEC      | <b>CAFÉ</b>     | OCCASO revisited with Gaia DR2  |
| 18. 12. | 19. 12.<br>#5 2 N<br>Service  | <b>Lillo-Box (Villan, Cañada, Madrid)</b><br>CAB-Astrofísica (CSIC-INTA), ESO | <b>CAFÉ</b>     | The CAHA follow-up of TESS planet candidates (GTO)  |
|         | 23. 12.<br>#31 1 N<br>Service | <b>Cordes (Bonn)</b><br>Bonn University                                       | <b>BUSCA</b>    | BUSCA GT  |
| 24. 12. | 25. 12.<br>#52 2 N<br>Service | <b>Hooton</b><br>Queen's University Belfast                                   | <b>BUSCA</b>    | storms or Systematics? Investigating the changing eclipse depth of ultra-hot Jupiter WASP-12b |
|         | 30. 12.<br>#53 1 N<br>Service | <b>Blinov</b><br>University of Crete  | <b>CAFOS</b>    | Clarifying nature of VLBI-Gaia coordinates offsets in unresolved AGN                          |

#### Target of Opportunity programmes:

- De Ugarte (#20 & #21)** GRB follow-up: Afterglow, supernovae and hosts of massive stellar explosions  
3 & 3 triggers; total nights: 2 & 1  
Instrument: CAFOS & BUSCA
- Kann (#22 & #23)** Follow-up of Gravitational-Wave Sources at CAHA  
1 to 10 events ; total nights: 4 & 1  
Instrument: CAFOS & BUSCA
- Santos-Sanz (#24)** Stellar occultations by Dwarf Planets, TNOs and Centaurs  
4 occultations; total nights: 0.5  
Instrument: CAFOS (or 2.2m AG or AstraLux)
- Castro-Tirado (#27)** CAHA follow-up of gravitational radiation sources in the Multi-messenger Era  
4 triggers; total nights: 3  
Instrument: CAFOS or BUSCA