

ArAS First Advanced School of Astrophysics (ArAS SfA-Adv1)

October 16-21, 2021

Arrival Friday Oct. 15, Departure Friday Oct. 22.

Saturday (16 October) Opening Ceremony / Spectroscopy

GMT/UTC **Cairo**

5:30 - 7:00 07:30 - 09:00 *Breakfast & Logistics* (Hadia Selim – LOC Chair)

7:00 - 9:00 09:00 - 11:00 *Registration*

9:00 - 9:45 11:00 - 11:45 Opening Ceremony: Chair: Hadia Selim

Prof. Gad El-Qady - NRIAG President

Zouhair Benkhaldoun – ArAS President

Hadia Selim – LOC Chair

9:45 - 10:00 11:45-12:00 **Break**

Chair: Zouhair Benkhaldoun

10:00-11:00 12:00-13:00 Model Analysis of spectrum (**Mohamed. I. Nouh**)

12:00-12:30 14:00-14:30 **Hands-on session** - photometric data reduction (**Ahmed Shokry**)

12:30-13:30 **14:30-15:30** **Lunch**

13:30-16:30 15:30-18:30 **Hands-on session** - spectroscopic data reduction (**Ahmed Shokry**)

16:30-17:30 **18:30-19:30** **Dinner**

18:30-20:00 **20:30-22:00** Observations using Kottamia telescope(s) Team

Sunday (17 October) Spectroscopy Instrumentations / Exoplanets

Chair: Hadia Selim

GMT/UTC Cairo

07:30 - 8:30	Breakfast
07:00-08:00 09:00-10:00	Spectroscopy Overview / ISIS Software (F. Sefyani)
08:00-09:00 10:00-11:00	Measurement of Radial Velocity by Cross Correlation Function CCF (F. Sefyani)
09:00-09:30 11:00-11:30	Break
09:30-10:30 11:30-12:30	Radial Velocity for Exoplanets (Z. Benkhaldoun)
10:30-14:00 14:30-16:00	Lunch
12:30-13:30 14:30-15:30	Exoplanets Observations (Z. Benkhaldoun)
13:30-14:30 15:30-16:30	Preparing to Observe Exoplanets from Oukaimeden Observatory (K. Barkaoui & G. Mourad)
14:30-16:30 16:30-18:30	Q&A session
16:00-17:30 18:30-19:30	Dinner
19:30-20:30	Free time
18:30-20:00 20:30-22:00	Observations using Kottamia telescope(s) Team

Monday(18 October) Practical Sessions of Data Processing

Chair: Hadia Selim

GMT/UTC Cairo

07:30 - 8:30 ***Breakfast***

07:00-09:00 09:00-11:00 (Spectral Data reduction: **Sefyani & Benhida - Team**)

09:00-09:30 11:00-11:30 ***Break***

09:30-10:30 11:30-12:30 (Python Interface for spectroscopic data reduction: **Y. El Jariri**)

10:30-12:30 12:30-14:30 Spectral Kottamia data reduction: (**F. Sefyani A. Benhida and Kottamia Team**)

12:30-14:00 14:30-16:00 ***Lunch***

14:00-16:30 16:00-18:30 Free Afeternoon

16:30-17:30 18:30-19:30 ***Dinner***

Tuesday(19 October) Spectroscopy of Variable Stars & Stellar Spectropolarimetry

Chair: Ali Takey

GMT/UTC **Cairo**

7:30 - 8:30 ***Breakfast***

10:00-11:00 **9:00-10:00** Asteroseismology: Variable stars (**Katrien Kolenberg**)

11:00-12:00 **10:00-11:00** Spectroscopy of Variable Stars (**A. Benhida & F. Sefyani**)

09:00-09:30 **11:00-11:30** ***Break***

09:30-12:30 **11:30-14:30** **Hands-on session**

12:30-14:00 **14:30-16:00** ***Lunch***

14:00-15:00 **16:00-17:00** Stellar Spectropolarimetry (**Philippe Matias**)

15:00-16:00 **17:00-18:00** Q&A session

16:30-17:30 **18:30-19:30** ***Dinner***

19:30-20:30 ***Free Time***

18:30-20:00 **20:30-22:00** Observations using Kottamia telescope(s) Team

Wednesday(20 October) 3D Spectroscopy / Data reduction

Chair: F. Sefyani

GMT/UTC EDT

7:30 - 8:30	Breakfast
06:30-07:00 09:00-10:00	3D Spectroscopy I (Ismael Moumen)
08:00-09:00 10:00-11:00	3D Spectroscopy II (Ismael Moumen)
09:00-09:30 11:00-11:30	Break
09:30-11:00 11:30-13:00	Data reduction and analysis of KFISP photometric Observations (Ali Takey)
11:00-12:30 13:30-14:30	Hands on session - Data reduction and analysis of KFISP photometric Observations (Ali Takey)
12:30-14:00 14:30-16:00	Lunch
14:30-16:00 16:30-18:00	Hands on session - Data reduction and analysis of KFISP photometric Observations (Ali Takey)
16:00-17:30 18:00-19:30	Dinner
17:30-18:30 19:30-20:30	Free Time
18:30-20:00 20:30-22:00	Observations using Kottamia telescope(s) Team

Thursday (21 October) Practical Session / Students presentations

Chair: Zouhair Benkhaldoun & Hadia Selim

GMT/UTC EDT

7:30 - 8:30	<i>Breakfast</i>
06:30-08:00 08:30-10:00	Presentations of students hands on session results - poster/oral
08:00-09:00 10:00-11:00	Presentations of students hands on session results - poster/oral
09:00-09:30 11:00-11:30	<i>Break</i>
09:30-10:30 11:30-12:30	poster/oral students presentation (own work, Ph.D., Master, etc.)
12:30-12:30 12:30-14:30	Q&A session
12:30-14:00 14:30-16:00	<i>Lunch</i>
14:00-15:00 16:00-17:00	Feedback & Discussions
15:00-16:30 17:00-18:30	<i>Closing Ceremony</i>
16:30-17:30 18:30-19:30	<i>Dinner</i>