# National Workshop on "Optical and UV Astronomical Data Analysis" for researchers and faculty 6 - 7 January, 2018

#### Report

A National Collaborative Workshop on "Optical and UV Astronomical Data Analysis" was organized by the Department of Physics, Sacred Heart College, Chalakudy in collaboration with the Indian Institute of Astrophysics, Bangalore and the Academy of Physics Teachers, Kerala on 6<sup>th</sup> and 7<sup>th</sup> January 2018. This workshop is aimed at enhancing the astronomical data analysis skills of researchers in the area of Astrophysics. The team of scientists from IIA handling ASTROSAT Data served as resource persons for the workshop. The faculty, researchers and students across the nation who attended the workshop provided positive feedback, especially about the hands-on training they obtained during the workshop. The certificate issued for the workshop clearly establishes the collaboration with the Indian Institute of Astrophysics (IIA), Bangalore.



#### Brochure of the Event which shows the collaboration:

APT COMPUTATIONAL PHYSICS SERIES Series 1 : Astronomical Data Analysis				
National Workshop 4: OPTICAL AND UV ASTRONOMICAL DATA ANALYSIS In Collaboration with IIA, Bangalore				
Topic : OPTICAL AND UV ASTRONOMICAL DATA ANALYSIS				
Dates : 6 - 7 January 2018				
Venue : Sacred Heart College, Chalakudy				
<ul> <li>Resource persons : 1. Dr. P. Sreekumar, Director, Indian Institute of Astrophysics, Bangalore</li> <li>2. Dr. Annapurni Subramaniam, Professor, IIA</li> <li>3. Dr. C. S. Stalin, Associate Professor, IIA</li> <li>4. Dr. Koshy George, Post-Doctoral Fellow, IIA</li> <li>5. Rekhesh Mohan, Scientist D, IIA</li> </ul>				
The workshop is a joint venture of APT, Kerala, IIA, Bangalore and Sacred Heart College, Chalakudy. In this workshop, we will start with the basic techniques of astronomical data analysis in the optical and ultraviolet band and discuss how the data can be extracted and analyzed. The resource persons belong to the team of scientists in charge of the UV telescopes in the Indian satellite ASTROSAT and the original data from ASTROSAT will be used for hands-on sessions. The workshop aims to provide teachers and students with a range of ideas and activities which will help the them initiate minor projects related to optical and UV astronomy. Both students and teachers can apply. No registration fee for students.				
Maximum intake:40Last date for registration :20 December 2017				

**Registration fee** : Non-Resident : Rs.600, Resident : Rs.900.

**How to apply** : Transfer the registration fee by internet banking to the account of Nijo Varghese, SB A/C. No: 67066021541, Bank: SBI, Chalakudy PSB, IFSC: SBIN0071020. After transferring the fee, notify your name, college, amount credited, and transaction ID and date by e-mail to <u>nijovarghesen@gmail.com</u>.

#### Coordinator

: Dr. Nijo Varghese, Dept. of Physics, Sacred Heart College, Chalakudy E-mail : <u>nijovarghesen@gmail.com</u> | Ph : 9496805788

#### SCHEDULE

## Day - 1 (06 January 2018)

10:00 - 10:45 :	Optical and UV astronomy in India : Current scenario and future possibilities Dr. P. Sreekumar
11:15 - 12:00 :	Optical Astronomy: Observations and observables Dr. Annapurni Subramaniam
12:00 - 13:00 :	Optical Astronomy: Procedures to extract information from Data Dr. C. S. Stalin
14:00 - 15:30 :	Optical Astronomy: Hands-on-session Stalin/ Annapurni Subramaniam / Snehalata Sahu/ Kshama Kurian
16:00 - 17:30 :	Optical Astronomy: Hands-on-session - continued Stalin/ Annapurni Subramaniam/ Snehalata Sahu/ Kshama Kurian
	Day 2: (07 January 2018)
10:00 - 10:45 :	UV astronomy: Observations and observables Dr. Annapurni Subramaniam
11:15 - 12:00 :	UV Astronomy: Procedures to extract information from UVIT on board AstroSat Dr. C. S. Stalin
12:00 - 12:45 :	UV Astronomy: Planning an observation with UVIT Rekhesh Mohan/ Koshy George
14:00 - 15:30 :	UV Astronomy: Hands on session for UVIT analysis Snehalata Sahu/ Stalin/ Koshy George/ Rekhesh Mohan
16:00 - 17:30 :	UV Astronomy: Hands on session for UVIT analysis - continued Snehalata Sahu/ Stalin/ Koshy George/ Rekhesh Mohan
17:30 - 17:45 :	Feedback from participants

#### Image 1: Dr. P Sreekumar, Director, IIA inaugurating the event

#### Image 2: Newspaper Report



# ജ്യോതിശാസ്ത്ര ശില്പശാല

ലാല് സെന്റ്റ് പ്രാർ ട്രോഗ് പ്രാർ ന്ത്രിന്റെ അജ്മപ്രത്തിൽ രണ്ടാമത്തെ വണ്ടാണ് ദേശീയ ശില്ലശാല സംഘടി പ്പിക്കുന്നത്.

് പ്ലെഎസ്.ആർ.ഒ.യുടെ ആസ്ട്രോസ്റ്റു റ്റ് ഉപഗ്രഹവുമായി ബന്ധപ്പെട്ട വിപരങ്ങ ല്ലെറാല ഇതിനായുള്ള സോഫ്റ്റ്വേർ പദ് പാടിയിൽ പർചയപ്പെടുത്ത്. ഇന്ത്യപ്പിക് സ്റ്റിവ്യൂട്ട് പെട് ആസ്ടോഫിൻസ് ഡയ റകർ ഡോ. പി. ശ്രീകുമാർ, അധ്യാപിക ഡോ. ഞന്നപൂർണ്ണിസുദ്ധ്രപങ്ങം എന്ന പർ പ്രധാനമായി ക്ലാസെടുത്തം.

റത്രം ഡോ. ഫ. ത്രൂഷ്യസം, അധ്യാഷനം, പ ഡോ. അന്നപൂർണ്ണസംബ്രാഷനം, എന്നി വർ പ്രധനമായി ക്രാംസെയുത്തു. പ്രിൻസിപ്പൽ ഡോ. സിഎഫ് സ്റ്റാലിർ, ഡോ. പ്രകാശ് ജോർജ്, ഡോ. കൈഷ് മോഹൻ, ഡോ. നിജോ വർഗീസ് തുടങ്ങി യവർ പ്രസംഗിച്ചു.

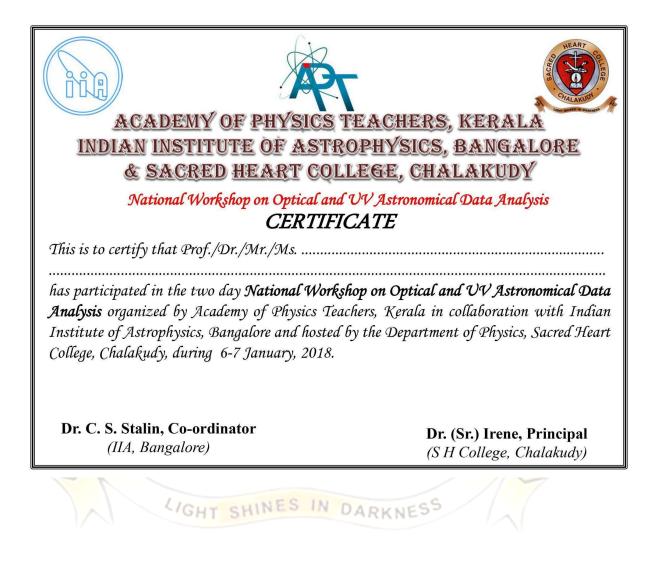


അക്കാദമി ഓഫ് ഫിസിക്സ് ടീച്ചേഴ്സ് ളേജുകളുമായി സഹകരിച്ച് സംസ്ഥാനത കേരളയുടെ നാലാമത് ശില്പശാലയാണ് ലത്തിലാണ് അക്കാദമി ശില്പശാലകംം സം സേക്രഡ്ഹാർട്ടിൽ നടന്നത്. വിവിധ കോ ഘടിപ്പിക്കുന്നത്.

#### **Translation** -

### Title: ASTRONOMICAL WORKSHOP

Chalakudy: Two day National Workshop on Astronomical data analysis was conducted at Sacred Heart College, Chalakudy. This is the second time a national workshop being organized by the Department of Physics. The workshop was related to the analysis of the information regarding ISRO satellite ASTROSAT. The software required for the data analysis was introduced. The sessions were headed by Dr. P. Sreekumar, Director, Indian Institute of Astrophysics, and Dr. Annapurni Subrahmanyam. Principal Dr.Sr. Irene presided over the function. Dr. C.S.Stalin, Dr.Prakash George, Dr. Nijo Varghese addressed the gathering. This is the fourth workshop being conducted at Sacred Heart College in association with the Academy of Physics Teachers, Kerala. Model of Certificate issued for the Workshop which indicates the Collaboration with IIA



# List of Participants

	APT COMPUTATIONAL PHYSICS SERIES Series 1 : Astronomical Data Analysis National Workshop 4 : OPTICAL AND UV ASTRONOMICAL DATA ANALYSIS In Collaboration with IIA, Bangalore		
	Teachers		
SI.No	Name	Institute	
1	Dr. Sujatha N V	St. Xavier's Collage, Aluva	
2	Aranya S	S.N College, Sivagiri, Varkala	
3	Dr. Vinod G	Sree sankara College, Kalady	
4	Dr.B.Kavitha	Sri G.V.G Visalakshi College for women, Tamil Nadu	
5	Ms.J.Sree Sudha	Sri G.V.G Visalakshi College for women, Tamil Nadu	
6	Abdul Rahoof K A	Sullamussalam Science College, Areacode	
7	Sudheesh T P	Newman College, Thodupuzha	
8	Shahana.T.A	M.E.S.Asmabi, Kodungallur	
9	C Sukesh	Govt. Victoria College Palakkad	
10	Nimmi Narayanan	Sree Sanakara College Kalady	
11	Minu.K.M	S N College, Nattika.	
12	Dr. Shaju K Y	Christ College, Irinjalakuda	-
13	Fency K F	S H College, Chalakudy	-
14	Bhavana E M	AWH Engineering College, Kozhikode	
15	Aparna Raj	K.E College, Kottayam	-
16	Dr. Jeena	Providence College	
17	C A Safeeque	Sullamussalam Science College, Areacode	
	Students		
18	Jasmine Mary Kuriakose	Assumption College, Changanacherry	M.Sc
19	Dhanya Mary Mathew	Assumption College, Changanacherry	M.Sc
20	Amrutha Gayathri A	Bishop Moore College, Maveli	1M.Sc
21	Devika B S	Bishop Moore College, Maveli	1M.Sc
22	Koushika VP	Central University of Tamilnadu	int MSc
23	Dona Joseph	Christ College, IJK	B.Sc
24	Aswani	Christ College, Ijk	M.Sc
25	Delji Jose	Christ College, Ijk	M.Sc
26	Faiha mujeeb	CUSAT	M.Sc
27	Mahith M	CUSAT	M.Sc
28	Rahul G S	Devaswom Board College	1M.Sc
29	Thahsina Ibrahim	M.E.S.Asmabi, Kodungallur	B.Sc
30	Kasthuri. N.M.	M.E.S.Asmabi, Kodungallur	B.Sc
31	Catherine George	Marthoma College, Thiruvalla	2M.Sc
32	Shilpa Mary Mathew	Marthoma College, Thiruvalla	2M.Sc
33		Newman College, Thodupuzha	M.Sc
34		Newman College, Thodupuzha	M.Sc
35	Sharon Xavi	NSS College, Ottapalam	M.Sc
36	Elza Johnson	S H College, Chalakudy	2M.Sc
37	Niya Yathendran	S H College, Chalakudy	1M.Sc
38	Sreelekshmi Krishnadas	S H College, Thevara	M.Sc
39	Rajalakshmi T R	SPAP, M.G.University	RS
40	Bismi Badherdheen	SPAP, M.G.University	2M.Sc
41	Ms.S.Agalya	Sri G.V.G Visalakshi College for women, Tamil Nadu.	M.Sc
42	Ms.C.Prema	Sri G.V.G Visalakshi College for women, Tamil Nadu.	M.Sc
43	Ms.C.Sangeetha	Sri G.V.G Visalakshi College for women, Tamil Nadu.	M.Sc
44	Mariya Maneesha TS	St Albert's college	M.Sc
45	Dhivya Murali	St Albert's college	M.Sc
46	Merlin Varghese	St. Thomas College, Thrissur	B.Sc