Report of 2015 Honduras ISYA

by Kam-Ching Leung, Director of ISYA

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The three week 2015 Honduras ISYA (web site http://faces.unah.edu.hn/isya/) 2015 November 23 – December 11 went exceedingly well in spite of prior planning challenges. Dr. María Cristina Pineda de Carías of National Autonomous University of Honduras (NAUH), the Co-Director of the School underwent serious surgery several months before the start of the School. I was also unable, due to other commitments, to visit Tegucigalpa in October 2015 to complete a prior site survey.

The countries from which students applied were 14 and the final Regional Countries of the students accepted were 12. The Host set the maximum of students to be 30 mainly due to the limited facility (housing and lecture room capacity). Student applicants were 46. The academic level of students was about half MS and half BS with only 3 students working on their PhD. The host country sent 10 students instead the traditional 50% of the students. The regional students composed of 2/3 of the student body! Just before the starting of the School one of the two students from Cuba could not come. The ratio of male to female students was 18 to 12. The ratio of male to female students from Honduras was 9 to 1!

The Honduras School was exceptional as compared with other recent Schools. Nine of the Honduras students (all male) were faculty members with MSc degrees. The only female student was a 4th year BSc Student! All of them were diligent students eager to learn new techniques and broaden themselves to new areas of astronomy.

The Lecturers composed of: Kam-Ching Leung (stayed for 3 weeks), Michele Gerbaldi (stayed for 3 weeks), Paola Olivia (stayed for 2 weeks), Silvia Torres-Peimbert (stayed for 4 days), Michel Dennefel (stayed for 2 weeks), Rodolfo Barba (stayed for 1 weeks). Edward F. Guinan was not able come at the last minutes due to sickness. Leung and Gerbaldi covered Guinan gave additional lectures.

In light of fact that many astronomy developing nations may not be installing research size observatories in the near future, we introduced Virtual Observatory Lab works to the students in the Honduras School. It was the first time the students were exposed to utilizing existing data collections to initiate research projects. Paola Olivia and Rodolfo Barba were responsible for the lectures and lab works of this section.

It seems the NAUH was able to very successfully host a low cost School similar to the 2010 Armenia School. They utilized a free church residence and engaged the faculty members for transportation between the residence and the University Campus. It was quite a contrast to the high cost Schools of 2012 Lijiang School and 2014 Chiang Mai School.

Participants of the 37th International School for Young Astronomers in Honduras

The schedule for the 37th ISYA:

http://faces.unah.edu.hn/astro/docs/isya/schedule_isya_2015.pdf

37th International School for Young Astronomers
November 22 - December 11
HONDURAS

Arrival to Tegucigalpa: Sunday, November 22

Week-1

Hour	Monday 23	Tuesday 24	Wednesday 25	Thursday 26	Friday 27	Saturday 28	Sunday 29
8:30 - 10:00	**Opening (MCPC) Welcome**	**LECTURE (MG 2) Stellar Fundamental Parameters : their determination in the light of the Gaia space mission**	**LECTURE (Paola 2) Kinematics and stellar populations of galaxies**	**LECTURE (Silvia 1) Interstellar matter - different phases and observations**	**LECTURE (Ed 3) Exoplanets -- finding them and searching for evidence of life (Astrobiology / Extremophiles)**	Trip to Valle de Angeles	Free
10:00 - 10:30	Recess	Recess	Recess	Recess	Recess		
10:30 - 12:00	**LECTURE (Kam 1) Binary Stars Research impact on Cosmology**	**LECTURE (Kam 2) Emission-Lines Stars 1**	**LECTURE (Ed 1) Sun in Time-- Magnetic Evolution of the Sun and effects on solar-system planets**	**LECTURE (Ed 2) Solar dynamos/flares and superflares and effects on Earth**	**STUDENT TALKS 1 (students)**		
12:00 - 14:00	Transfer to University Campus and Lunch						
14:00 - 15:30	**LECTURE (MG 1) Stellar Fundamental Parameters : their determination in the light of the Gaia space mission**	**LECTURE (Paola 1) Galaxy Formation and evolution in a nutshell**	**LECTURE (Ed) "To give a talk..."**	**Discussion "Interplanetary and Interestellar travel, Mars colonization and beyond"**	**PUBLIC TALK (Silvia Torres) La vida y la muerte de las estrellas y su huella en la historia de la Galaxia**		
15:30 - 16:00	Recess	Recess	Recess	**Recess**	Recess		
16:00 -18:00	1) Presentation of the School (Kam) ; 2) Practical information (MJQ). 3) Students intro themselves. 4) Presentation of the Labs activities (MG).	**LECTURE (MG) "Basics of Observational astronomy"**	**LAB Set up of the Lab activities (MG); Lab 1**	**Discussion (Ed., MCPC)**	LAB (MG) Lab 2		
18:00 - 18:30	Transfer to Student´s Residence						

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Week-2

Hour	Monday 30	Tuesday 1	Wednesday 2	Thursday 3	Friday 4	Saturday 5	Sunday 6
8:30 - 10:00	**POSTER PRESENTATIONS by the students having chosen that way of presentation. 1**	**LECTURE (Paola 3) Virtual observatory: current tools**	**LECTURE (MG) Gaia Space Mission**	**LECTURE (MD 2) The "variable sky" astrophysics, and the need of spectroscopic follow-up**	**Trip from Tegucigalpa to Copan Ruins**	**LECTURE (VV) The Stelae of the Archaeological Park**	**Trip from Copan Ruins to Tegucigalpa**
10:00 - 10:30	Recess	Recess	Recess	Recess			
10:30 - 12:00	**LECTURE (Kam 3) Emission-line Stars (2)**	**LECTURE (Kam 4) Eclipsing Binary Systems**	**LECTURE (MD. 1) Modern detectors**	**LECTURE (MD) Writing a proposal + some student talks**		**Guided Visit to the Ruins (JM)**	
12:00 - 14:00	Transfer to University Campus and Lunch						
14:00 - 15:30	**LAB (MG) … Lab 2**	**LAB (MG) Lab 4**	**STUDENT TALKS 2 (students)**	**LECTURE (Paola 3) Virtual Observatories: current tools and Lab.**			
15:30 - 16:00		Recess	Recess	Recess			
16:00 -18:00	**LAB (MG) Lab 3**	**LAB (Paola)**	**POSTER PRESENTATIONS by the students having chosen that way of presentation. 2**	**LAB (MG) Remote observations open cluster/data base of open cluster**		**Guided Visit to the Town Museum (JM)**	
18:00 - 18:30	Transfer to Student´s Residence						

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Week-3

Hour	Monday 7	Tuesday 8	Wednesday 9	Thursday 10	Friday 11	Saturday 12	Sunday 13
8:30 - 10:00	**LECTURE / LAB (RB 1) Virtual observatories for a funny Astronomy research**	**LECTURE / LAB (RB 2) Virtual observatories for a funny Astronomy research**	**LECTURE / LAB (RB 3) Virtual observatories for a funny Astronomy research**	**LECTURE (MG 4) Stellar Atmosphere modeling (…cont.)**	**Students lab presentation**		
10:00 - 10:30	Recess	Recess	Recess	Recess	Recess		
10:30 - 12:00	**LECTURE (MD 3) The development of telescopes, and present technologies involved**	**LECTURE (MD 4) Instrumentation, mainly spectrographs**	**LECTURE (MG 3) Stellar Atmosphere modeling**	**Alumni Session The future; Preparation of the presentations**	**Students lab presentation**		
12:00 - 14:00	Transfer to University Campus and Lunch					**Departure**	
14:00 - 15:30	**LAB (RB 1)**	**PUBLIC TALK (Rodolfo Barbá) Cómo pesar estrellas**	**LECTURE (MCPC) Meteors and meteorites**	**LECTURE (MD) Writing CVs, publishing …**	**Students lab presentation ; Evaluation**		
15:30 - 16:00	Recess	Recess	Recess	Recess	Recess		
16:00 -18:00	**LAB (RB 1) …cont.**	**LAB (RB 2) …cont.**	**LAB (RB 3) …cont.**	**Preparation of the presentations (cont)**	**Closing LOC**		
18:00 - 18:30	Transfer to Student´s Residence						
19:00 - 21:00				**Closing dinner**			

Silvia Torres Peimbert	Silvia
Kam-Ching Leung	Kam
Edward Guinan	Ed
Rodolfo Barbá	RB
Paola Oliva-Altamirano	Paola
Michel Dennefeld	MD
Michele Gerbaldi	MG
María Cristina Pineda de Carías	MCPC
María de Jesús Quiroz	MJQ
Vito Véliz	VV
Javier Mejuto	JM