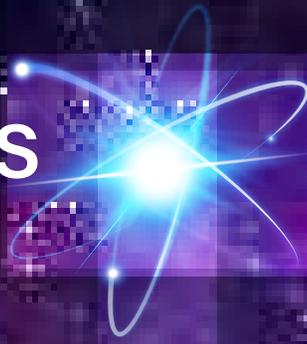


Astrophysics Camp



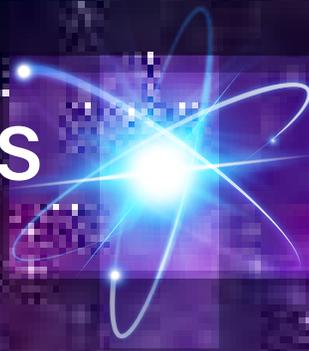
PURDUE
UNIVERSITY
Department of Physics and Astronomy



MONDAY 13 MARCH

HOUR	DAILY THEMES	CONCEPTS	POSSIBLE LABS	CONTEXT
10:00 am	Departure from Medellín			
12:00 m	Lunch			
1:00 pm a 3:30 pm	Opening ceremony	Welcome participants. Greeting Facilities and general instructions about the camp	N/A	Participants go to auditorium (nombre de Auditorio) Opening: Gloria Figueroa
3:30 pm a 4:00 pm	Break			
4:00 pm a 6:00 pm	Training session: Sky maps and Stellarium	Sky map management. Use of software "Stellarium" Night observation.	Sky map printed	Students will be able to make a night observation using the sky map properly.
6:30 pm a 7:30 pm	Dinner			
Evening	Observation/Video forum	Constelations, planets heavenly bodies	Telescopes, binoculars, sky map and astronomy software	Outdoor observation with instruments of astronomy
9:00 pm	Sleeping time			

Astrophysics Camp



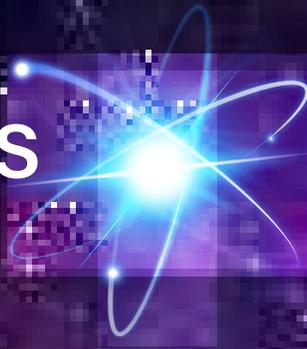
PURDUE
UNIVERSITY
Department of Physics and Astronomy



TUESDAY 14 MARCH

HOUR	DAILY THEMES	CONCEPTS	POSSIBLE LABS	CONTEXT
7:30 am a 8:30 am	Breakfast			
8:30 am a 12:00 m	Early Discoverers	Latitude, longitude, geometry, trigonometry, proportions	The Earth's Circumference in 245 B.C Aristarchus and the Moon	Measurement of the Earth's circumference with shadows. Using parallax to estimate the distance from Earth to the moon.
12:00 m a 1:00 pm	Lunch			
1:00 pm a 3:30 pm	Planetary Surfaces	Mapping, graphing surface features Using different kinds of light and reflectance.	Surface and Geology of Mars	How do the rovers identify surface features and materials on Mars? Methods of remote sensing.
3:30 pm a 4:00 pm	Break			
4:00 pm a 6:00 pm	Exploring the Night Sky	Eclipses and transits, luminosity, periodicity How Earth moves in Space	Identifying planets around other stars Star trails; Astrophotography	Analyzing evidence for the existence of other worlds.
6:30 pm a 7:30 pm	Dinner			
Evening	Observation/Planetario móvil	Constelations, planets heavenly bodies	Telescopes, binoculars, sky map and astronomy software	Outdoor observation with instruments of astronomy
9:00 pm	Sleeping time			

Astrophysics Camp



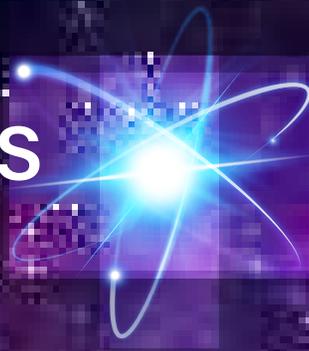
PURDUE
UNIVERSITY
Department of Physics and Astronomy



WEDNESDAY 15 MARCH

HOUR	DAILY THEMES	CONCEPTS	POSSIBLE LABS	CONTEXT
7:30 am	Breakfast			
9:00 am a 12:00 m	Light and Space	Propagation of light, brightness of stars, spectral class, star color and temperature Tracing events through time Coding and programming	Exploring Isochromes using Jupyter notebook H-R Diagrams and compact remnants The Inverse Square Law	Using elementary coding to illustrate patterns in the lifetimes of stars. How the intensity of light varies with space and distance.
12:00 m a 1:00 pm	Lunch			
1:00 pm a 3:30 pm	Solar workshop	Movement of the sun, ecliptic, solar cycle	Making sundials	Outdoor workshop to identify movements of the sun through the making of sundials.
3:30 pm a 4:00 pm	Break			
4:00 pm a 6:00 pm	Violent Space	Destinies of stars determined by mass, kinetic and potential energy, classes of supernovae	Supernovae – The Deaths of Stars	What happens to stars when they die and what factors define their destiny.
6:30 pm a 7:30 pm	Dinner			
Evening	Observation/Video foro	Constelations, planets, Heavenly bodies	Telescopes, binoculars, sky map and astronomy software	Outdoor observation with instruments of astronomy
9:00 pm	Sleeping time			

Astrophysics Camp



PURDUE
UNIVERSITY
Department of Physics and Astronomy



THURSDAY 16 MARCH

HOUR	DAILY THEMES	CONCEPTS	POSSIBLE LABS	CONTEXT
7:30 am	Breakfast			
9:00 am a 11:30 am	Ecological tour and Scavenger Hunt	Spatial location	Compass handling, location using maps	Ecological tour around the site, contact with nature.
11:30 am a 12:00 m	Check out			
12:00 m a 1:00 pm	Lunch			
1:00 pm a 3:00 pm	Closing ceremony and return to Medellín	Certificates delivery	N/A	Auditorium. Closing: Gloria Figueroa