



# Spectacular Spectrum

HOLIDAY PROGRAMME | 16 - 31 March 2019

## Activities Timetable

TIME	SATURDAY 16 March	SUNDAY 17 March	MONDAY 18 March	TUESDAY 19 March	WEDNESDAY 20 March	THURSDAY 21 March	FRIDAY 22 March
10:00 - 11:00 VENUE	Wonders of Light Dow Lab	Liquid light Sangari Lab	Telescope Sangari Lab	Laser Security Alarm Festo Lab	Bending Light Festo Lab	Spining Your Colour Festo Lab	Laser Security Alarm Festo Lab
11:30 - 12:30 VENUE	Light Quiz Festo Lab	Pinhole Camera Dow Lab	Spining Your Colour Festo Lab	Wonders of Light Dow Lab	Liquid light Sangari Lab	Telescope Sangari Lab	Wonders of Light Dow Lab
13:00 - 14:00 VENUE	Science Show: The stimulant of sight SAP Auditorium						
14:30 - 15:30 VENUE	Laser Security Alarm Festo Lab	Bending Light Festo Lab	Glow in a bottle Dow Lab	Light Quiz Festo Lab	Pinhole Camera Dow Lab	Glow in a bottle Dow Lab	Light Quiz Festo Lab

TIME	SATURDAY 23 March	SUNDAY 24 March	MONDAY 25 March	TUESDAY 26 March	WEDNESDAY 27 March	THURSDAY 28 March	FRIDAY 29 March
10:00 - 11:00 VENUE	Pinhole Camera Dow Lab	Telescope Sangari Lab	Light Quiz Festo Lab	Glow in a bottle Dow Lab	Liquid light Sangari Lab	Wonders of Light Dow Lab	Glow in a bottle Dow Lab
11:30 - 12:30 VENUE	Liquid light Sangari Lab	Glow in a bottle Dow Lab	Laser Security Alarm Festo Lab	Spining Your Colour Festo Lab	Bending Light Festo Lab	Light Quiz Festo Lab	Bending Light Festo Lab
13:00 - 14:00 VENUE	Science Show: The stimulant of sight SAP Auditorium						
14:30 - 15:30 VENUE	Bending Light Festo Lab	Spining Your Colour Festo Lab	Wonders of Light Dow Lab	Telescope Sangari Lab	Pinhole Camera Dow Lab	Laser Security Alarm Festo Lab	Spining Your Colour Festo Lab

NB: Kindly note that workshops are subject to change without prior notice.



# Spectacular Spectrum

HOLIDAY PROGRAMME | 16 - 31 March 2019

## Activities Timetable

TIME	SATURDAY 30 March	SUNDAY 31 March
10:00 - 11:00 VENUE	Liquid light Sangari Lab	Telescope Sangari Lab
11:30 - 12:30 VENUE	Light Quiz Festo Lab	Spining Your Colour Festo Lab
13:00 - 14:00 VENUE	Science Show: The stimulant of sight SAP Auditorium	
14:30 - 15:30 VENUE	Glow in a bottle Dow Lab	Wonders of Light Dow Lab

NB: Kindly note that workshops are subject to change without prior notice.



**PLANETARIUM**

@ Sci-Bono Discovery Centre

## Daily Planetarium Shows

Times: 11:00 | 12:30 | 14:00 | 15:30

## Activities

<b>TELESCOPE</b> From the first telescope invented by lens maker, Hans Lippershey in 1608 to those used by Galileo Galilei to observe the sky, a completely new spectrum opened up of the universe around us. Come along and build your own telescope while exploring how the invention of this powerful instrument has changed the way we look at the sky.	AGE 8+	COST R10	<b>LASER SECURITY ALARM</b> Interrupt the laser beam and you will hear the alarm. This cutting edge security system has been around for many years. Come let us build our own Laser Security System and even learn the underlying principles of the functioning of the lasers and sensors.	AGE 8+	COST R10
<b>WONDERS OF LIGHT</b> A red object appears red because it reflects mostly red light back to your eyes, but what can make a red object black? Come and discover how light can make this happen.	AGE 6+	COST R10	<b>BENDING LIGHT</b> Light helps us see all the things around us, without light there is no sight but have you thought of what happens to our sight when light changes direction. This is a phenomena is called refraction, in this workshop you will discover the results of refraction through a number of experiments!	AGE 6+	COST FREE
<b>LIQUID LIGHT</b> Have you ever been fascinated by things that glow in the dark. Have you ever wondered how these things glow in the dark? It can be a lot of fun to play with bracelets and other toys that glow-in-the-dark, like some plastic insects. Guess what? It's not magic! Just simple and plain science. Come join us as we make a liquid that glows in the dark.	AGE ALL	COST R10	<b>LIGHT QUIZ</b> Light is the natural agent that stimulates sight and makes things visible. It plays a vital role in our daily lives and is an imperative crosscutting discipline of science. Brighten your science knowledge with our fun light facts for kids.	AGE 7+	COST FREE
<b>GLOW IN A BOTTLE</b> Is it possible to make a plastic bottle glow? What makes the glow in glow sticks? Join us this holiday programme as we shed the light on "when chemistry makes light".	AGE ALL	COST R10	<b>PINHOLE CAMERA</b> What is a pinhole camera and how is it used in astronomy? In this activity, you will find out this and more as you make your own pinhole camera and explore how this humble device can be used to capture the movement of the sun and even solar eclipse.	AGE 8+	COST R10
<b>STIMULANT OF SIGHT</b> Let us engage in a Story of a natural agent that stimulates sight-making things visible, where a story of light and sight will be a tale worth telling...	AGE ALL	COST FREE	<b>SPINNING YOUR COLOUR</b> Here is an amazing way to combine scientific principles of physics with the visual science of colour mixing to create a gizmo that will have you twirling and spinning for hours. The activity is not just visually spectacular, it is scientifically sound and filled with just enough open-ended curiosity that you are bound to make many versions of the Colour Mixing Wheel.	AGE 5+	COST R10