

Event Title	Open event	Location of Event	Description for program	Grade Level	Community Partner
"Augmented Reality" Coloring Station	Open Event	PAD 168	Color on a page and then watch technology bring your picture to life in animated 3D! Fun for all ages.	ALL	
"Dye"ing to Figure Out that Color	Open Event	PAD 377	What color is your food? Experiment with food dyes and instruments that measure the colors of the rainbow.	Grade 3-Adult	
Communicating with Light	Open Event	PAD 142	Try out communication methods using light throughout history, from ancient signals to modern fiber optic communications.	Middle Grades-Adult	
Electrochromic Technology	Open Event	PAD 207	Hands on experience with electrochromic products from Gentex Corporation. How Gentex controls light to help increase safety and convenience in vehicles.	ALL	GENTEX Corporation
Enlighten Yourself	Scheduled Event	PAD 211	Explore various properties of visible light through hands-on activities and demonstrations.	Grades 3-5	
Enlightening Chemistry	Open Event	PAD 305	Learn about glow sticks, explore glow in the dark materials, learn how to write invisible messages and more.	ALL	
Exploring Fluorescent Rocks and Minerals	Open Event	LTT Atrium	Discover why certain minerals light up and fluoresce under short and long wavelength ultraviolet light!	ALL	
From the Equator to the Poles: How People Live with Light	Scheduled Event	PAD 110	This event explores how humans across the world adapt to ultraviolet light from the sun through both biology and culture. Participants will use maps comparing skin color and solar radiation. Where in the world is your skin color?	Grades 6-8	

Geometrical Optics: Reflection and Refraction	Open Event	PAD 155	Hands-on activities and demonstrations using mirrors, lenses and other optical devices used to bend light!	ALL	
How Long will the Light Last?	Open Event	PAD 247	Statisticians design experiments to set guarantees on products such as light bulbs and glow sticks. We will collect data to analyze.	Grades 6-Adults	
Illusion of Light in Art	Open Event	PAD 119	Create drawings to reflect on how we perceive light while learning how artists throughout history have created the illusion of light.	Middle Grades-Adult	
Lazer Relay	Open Event	PAD 106	Using laser boxes and mirrors to reflect the laser beam onto a target.	Grades 3-8	
Let It Shine: The 6000-Year Story of Solar Energy	Scheduled Event	LTT 101	John Perlin is this year's Keynote speaker. He is not only a research scholar, but is also the author of Let it Shine: The 6,000-Year Story of Solar Energy.	ALL	
Life with 24 Hours of Light	Open Event	PAD 250	Activities highlighting adaptations for life in the Arctic and changes occurring in the Arctic as the region warms.	ALL	
Light and the Water World (room 1)	Open Event	PAD 205	Explore the wonders of the water world using different kinds of light (visible, strobe, black, infrared), microscopy, photography and remote sensing.	ALL	
Light and the Water World (room 2)	Open Event	PAD 206	Explore the wonders of the water world using different kinds of light (visible, strobe, black, infrared), microscopy, photography and remote sensing.	ALL	
Light: How we work with it and how it works against us at Genzink Steel	Open Event	PAD 328	See how Genzink Steel uses light in their production of steel. Measure with a laser and try to draw a line. See how steel is cut!	ALL	GENZINK STEEL

Lighting 101	Open Event	LTT Atrium	How can a rainbow of light create white light?	Grades 9-Adult	EarthTronics
Line Describing a Cone	Scheduled Event	PAD 261	3D virtual projection using a video that projects through haze and creates a cone the audience can interact with.	ALL	
Mike Gould: Talks with Lasers	Scheduled Event	LTT 102	An education lecture, demonstration, laser lightshow that is designed to teach you about the fascinating world of lasers.	ALL	
No Color? No Problem. We can analyze that.	Open Event	PAD 376	Check out how we can use invisible light to solve puzzles. We'll use ultraviolet and infrared light to study sunscreens and plastics.	ALL	
Physical Optics: Diffraction, Interference and Color	Open Event	PAD 157	Hands-on activities and demonstrations illustrating the wave nature of light-what is "waving," and how can we tell?	ALL	
Red Fish, Yellow Fish, Blue Fish: Where the Fish Rainbow Comes From	Scheduled Event	PAD 262	This workshop will explore the physics of how color originates in light. While learning about the color spectrum and the color wheel, participants will create their favorite rainbow fish.	K-8	
Searching for the Darkness	Open Event	PAD 244	Help us estimate the proportion of the state of Michigan where you can best star gaze.	Grade 3-Adult	
Shadow Sculpture	Open Event	PAD 331	Light transforms 3-D shapes into intricate and fascinating projections. Make an art investigation into the possibilities.	ALL	
TED-ED Talks: Videos on Light	Open Event	LTT 103	Stop in, relax, have a seat, and watch short, captivating videos on the various aspects of light.	ALL	
The Nature of Light	Scheduled Event	PAD 128	A double slit diffraction and observation of the spectrum.	Grade 9-Adult	

The Sun and the Solar System	Scheduled Event	PAD 103	View the sun and the solar system. Observe the sun's light and then take a to-scale walking tour of the Solar System.	ALL	
Using Light to Understand Breath-Holding	Open Event	PAD 107	Come use light to determine if you can hold your breath long enough to run out of oxygen.	Grades 3-Adult	

