

# NCRAL 2019

## *Astronomical Voyages of Discovery: Past, Present and Future*

The fine print: Although we're really solid on the following schedule, "stuff" can happen before May. The schedule may change if some of that "stuff" happens.

Day 1		Friday, May 3rd, 2019
Pre-convention Activities	9:00 - 16:00	John Deere Pavilion - Visit the John Deere Pavilion and JD Store
	10:00 - 11:30	John Deere Harvester Works - Factory Tour
	12:00 - 16:00	Rock Island Arsenal - Arsenal Gun Museum Tour
Registration Open	12:00 - 18:00	Pick up packets and get questions answered
Set-up	12:00 - 16:00	Participants bring DIY creations to show, Vendor set-ups
Solar Observing	13:00 - 15:30	Tours of the PACMO & solar viewing
Seminars	13:00 - 14:00	<i>Best Practices for Community Outreach</i> PAC Member and attendees
	14:00 - 16:00	<i>Astrophotography 101</i> Dino Milani, Terry Dufek, Rusty Case, Mike Ombrello
Kick-off	16:15 - 16:45	<i>Welcome</i> Mike Gacioch
		Give Away #1
		<i>Brief History of Popular Astronomy Club</i> Roy Gustafson
DIY Fair/Networking	16:45 - 18:00	Mingle, visit vendors, discuss DIY projects over dinner and cash bar
Dinner	16:45 - 18:00	Heavy Hors d'oeuvres and Cash Bar
Trivia Competition	18:00 - 18:30	Inter-club competition
Presentations 1 and 2	18:45 - 19:45	<i>A Relativistic Century: Eddington, Einstein, and the Great Eclipse</i> Lee Carkner (Augustana College)
	19:45 - 20:30	<i>Voyages of Discovery</i> Carl Wenning
Drive to Augustana College	20:30 - 21:00	Caravan and gather at John Deere Planetarium
At Augustana College	21:00 - 22:30	Tour John Deere Planetarium and Gamble Observatory
After-hours Activities	21:00 - ?	Dark Sky Observing (Menke Observatory visit, Moon sets ~ 18:46)

Day 2		Saturday, May 4th, 2019
Registration Open	7:30 - 12:00	Pick up packets and get questions answered
Breakfast/Networking	7:30 - 9:30	Continental Breakfast and networking
NCRAL Business Meeting	8:00 - 9:00	Give Away #2
		Carl Wenning
Brief Day Overview	9:15 - 9:30	Mike Gacioch and Alan Sheidler
		Give Away #3
Presentations 3 and 4	9:45 - 10:45	<i>A Discussion of Historical Tests of General Relativity</i> Robert Mutel, University of Iowa
	10:45 - 11:45	<i>Meteorites: Messengers from Space and Time</i> Paul Sipiera, Planetary Studies Foundation
Group Photo	11:45 - 12:15	Meet at PACMO for Group Photo
Lunch/Networking	12:15 - 13:00	Soup, Salad, Sandwich Buffet
		Give Away #4
Presentations 5 and 6	13:00 - 14:00	<i>Voyages of Discovery in Radio Astronomy</i> Esteban Araya, Western Illinois University
	14:00 - 15:00	<i>Gravitational Waves</i> Robert Mitchell, Saint Ambrose University
Break/Networking	15:00 - 15:30	Stretch break
Presentations 7, 8 and 9	15:30 - 17:00	<i>Our Coolest Stellar Neighbors: the Role of M Dwarf Stars in the Search for Earth 2.0</i> Katie Melbourne, student, Yale University
		<i>Tweeting to the stars with the Burke-Gaffney Observatory and learning about galaxy evolution using simulations</i> Tiffany Fields, student, St. Mary's University, Nova Scotia
		<i>Asteroid Research at the Monmouth College Adolphson Observatory</i> Bridgette Davey, student, Monmouth College
Networking	17:00 - 17:30	Cash Bar
Banquet	17:30 - 18:45	3-Entree Dinner Buffet
Awards	19:00 - 19:15	Give Away #5
		Astro League awards and introduction of keynote speaker
Keynote	19:15 - 20:15	<i>Different Views of the Sky; American Indian Views of Astronomy (and a look at where we are going in the future)</i> Steven Spangler, University of Iowa
Closing Remarks	20:15 - 20:30	Mike Gacioch and Alan Sheidler
After Hours Activities	20:30 - 12:00	Evening Observing Session with PACMO (Sunset is 8:02, new moon)
	21:00 - ??	Dark Sky Observing (Menke Observatory visit, Moon sets ~ 19:50)

Day 3 (morning)		Sunday, May 5th, 2019
At Bettendorf High School	9:00 - 10:00	<i>Panel Discussion: Involving Students in Astronomy</i> Ian Spangenburg, Chris Like, Alan Sheidler and students
		Give Away #6
At Bettendorf High School	10:00 - 11:00	Tour Bettendorf HS planetarium Chris Like