# GREEN BANK STAR QUEST XV PROGRAM SCHEDULE

**JULY 11 – 14, 2018** 

http://caacwv.com/

http://greenbankstarquest.org/

	GENERAL INFORMATION	
TIME	EVENT	LOCATION
9:00am-7:00pm	Registration/Welcome	Registration Desi
9:00am-6:00pm	Vendor Area Open	Visitor Center
8:30am-7:00pm	Starlight Cafe	Visitor Center
8:30am-7:00pm	Gift Shop	Visitor Center
9:00am-6:00pm	GBO Hourly Tours / Gift Shop	Visitor Center
10:00am-2:00pm DAILY	Daily Solar Observing (Weather Permitting)	Visitor Center
	Reminder: Check at the registration desk for daily schedule updates / revisions	
	Don't forget to purchase Raffle Tickets! \$1.00 each/\$5.00 for 6	
	Check out our 2018 Star Quest T-Shirts HOODIES AVAILABLE STAR QUEST MEMORABILIA	
	MEAL TICKETS AVAILABLE	Starlight Cafe
7:30am-9:00am	BREAKFAST Buffet Style	GBO Cafeteria
	LUNCH On Your Own Consider Visiting the Starlight Cafe	
5:00pm-7:00pm	DINNER Buffet Style	GBO Cafeteria
Dusk till Dawn	Observing	Your Site
8:30pm-10:00pm	Field Session Weather Permitting	Field

	WEDNESDAY IIII V 44 2049	
	WEDNESDAY- JULY 11, 2018	
TIMES	EVENT	Location
9:30am-11:00am	GBT Tour (sign-up sheet)	Meet at Registratio
	(Three Groups of Seven)	Desk
10:00am-11:00am	Deep Sky Imaging with a DSLR	Faraday Compute
	Brent Maynard	Lab
10:15am-11:45am	Mars-The Challenge of Observing the	Classroom
	Red Planet	
	Michael Rosolina	
12:00pm-1:00pm	Lunch Break	
1:00pm-2:00pm	Meteorites 101	Classroom
	David Holden	
1:00pm-3:00pm	Children's Activities	Star Lab Room
2:15pm-3:15pm	Space in the Cinemas	Classroom
	Caitlin Ahrens	
2:30pm	40' Radio Dish Orientation #1	Meet at Registration
	GBO Staffer	Desk
	20 person max. (sign-up sheet)	
2:30pm	High Tech Tour of the	Meet at Registration
	GBT Control Room	Desk
	(sign-up sheet)	
3:30pm-4:30 pm	Water on Mars	Classroom
	Rachel Slank	
	How to Image the Planets	Faraday
4:00pm-5:00pm	Brent Maynard	Computer Lab
5:00pm-7:00pm	Dinner Break	
	"FANTASTIC GEOLOGIES AND	
7:00pm-8:00pm	WHERE TO FIND THEM"	Auditorium
	CAITLIN AHRENS	
	KEYNOTE	
11:00pm-3:00am	40' Dish Observation Sessions	40' Radio Dish

_	THURSDAY- JULY 12, 2018	
TIMES	EVENT	LOCATION
	GBT Tour (sign-up sheet)	Meet At Registration
8:30am-10:00am	(Three Groups of Seven)	Desk
9:30am-10:30am	Processing Techniques for Deep Sky	Faraday Computer
	Images	Lab
	Brent Maynard	
9:30am-10:30am	Meteorites 102	Classroom
	Dave Holden	
10:00am-11:30am	Children's Activities	Star Lab Room
10:45am-11:45am	Serpent Mound: Mystery of	Classroom
	Earth and Sky	
	Terry Mann	
11:00am-12:00pm	Introduction to Radio Astronomy	Faraday Computer
	Sue Ann Heatherly, GBO	Lab
	40' Radio Dish Orientation #2	Meet at Registration
11:00am	GBO Staffer	Desk
	20 person max. (sign-up sheet)	
12:00pm-1:00pm	Lunch Break	
1:00pm-3:00pm	Children's Activities	Star Lab Room
1:15pm-2:15pm	The Rise of Modern Popular Culture and	Classroom
	the Great Mars Hoax	
	Bob Royce	
2:30pm-4:00pm	Mars-The Challenge of Observing the Red	Classroom
	Planet	
	Michael Rosolina	
	40' Radio Dish Orientation #3	Meet at Registration
2:30pm	GBO Staffer	Desk
	20 person max. (sign-up sheet)	
	Processing Techniques for Planetary	Faraday Computer
3:00pm-4:00pm	Images	Lab
	Brent Maynard	
	High Tech Tour of the	Meet at Registration
4:00pm	GBT Control Room	Desk
	(sign-up sheet)	
5:00pm-7:00pm	Dinner Break	-
	"RADIO ASTRONOMYFOR THE PUBLIC:	
7:00pm-8:00pm	MY ADVENTURES WITH THE TEACHING	Auditorium
	COMPANY"	
	DR. FELIX J. "JAY" LOCKMAN	
	KEYNOTE	
11:00pm-3:00am	40' Dish Observation Sessions	40' Radio Dish

	EDIDAY IIII V 40 0040	
TIMEO	FRIDAY- JULY 13, 2018	LOCATION
TIMES	EVENT	LOCATION
9:30am-10:30am	Heliophysics	Classroom
	Nathan Tehrani	_
10:00am-11:30am	Children's Activities	Star Lab Room
10:00am-11:30am	Magic Lantern, Advanced Firmware	Faraday
	For Your Canon DSLR	Computer Lab
	Brent Maynard	
10:45am-11:45am	The Life Cycle of Galaxies: Their	Classroom
	Birth, Evolution, and Eruptions	
	Tim Hamilton	
	40' Radio Dish Orientation #4	Meet at Registration
11:00am	GBO Staffer	Desk
	20 person max. (sign-up sheet)	
12:00pm-1:00pm	Lunch Break	
1:00pm-3:00pm	Children's Activities	Star Lab Room
	Exoplanet Detection Using A DSLR and	Faraday
1:15pm-2:15pm	Telephoto Lens	Computer Lab
	Brent Maynard	
	Cosmic Alchemy	Classroom
1:15pm-2:15pm	Maria Hamilton	
2:30pm-3:00pm	CubeSat Show & Tell	Classroom
	Bob Dutilly	
	40' Radio Dish Orientation #5	Meet at Registration
2:30pm	GBO Staffer	Desk
-	20 person max. (sign-up sheet)	
	New Horizons: To Pluto-And Beyond!	Classroom
3:00pm-4:00pm	Mark "Indy" Kochte	
	High Tech Tour of the	Meet at Registration
4:00pm	GBT Control Room	Desk
_	(sign-up sheet)	
5:00pm-7:00pm	Dinner Break	
	"FAST RADIO BURSTS"	
7:00pm-8:00pm	DUNCAN LORIMER	Auditorium
	KEYNOTE	
11:00pm-3:00am	40' Dish Observation Sessions	40' Radio Dish

	SATURDAY- JULY 14, 2018	
TIME	EVENT	LOCATION
SAT. 1:00am-6:00am	Radio Telescope Observing	40 Foot Dish
	40 foot dish	
9:00am-10:00am	Build Your Own Mini Space Rover	Classroom
	Nathan Tehrani	
10:00am-11:00am	GROUP PHOTO	Meet in Field
11:00	Children's Activities	Meet in Field
after group photo	Rocket Launch	
11:00am-12:00pm	Deep Sky Imaging-Open Discussion,	Faraday Computer
	Tips, Techniques, Tools	Lab
	Brent Maynard	
12:00pm-1:00pm	Lunch Break	
1:00pm-2:00pm	The Dawn of Multi-Messenger	Classroom
	Astrophysics-Detection of a Neutron Star	
	Merger in NGC 4993	
0.45	Michelle Shinn	
2:15pm-3:15pm	Amassa Holcomb, America's First Telescope Maker	Classroom
	Bob Royce	
3:30pm-4:00pm	CubeSat Show & Tell	Classroom
3.30piii-4.00piii	Bob Dutilly	Ciassiooiii
3:30pm-4:30pm	Planetary Imaging-Open Discussion,	Faraday
3:30pm-4:30pm	Tips, Techniques, Tools	Computer Lab
	Brent Maynard	Computer Lab
4:00pm	High Tech Tour of the	Meet at Registration
4:00pm	GBT Control Room	Desk
	(sign-up sheet)	Desk
5:00pm-7:00pm	Dinner Break	
J.Jopin-7.Jopin	"ROVING MARS-NASA'S SEARCH FOR	
7:15pm-8:30pm	LIFE ON ANCIENT MARS"	Auditorium
7.13piii-0.30piii	BRIONY HORGAN	Additorium
	KEYNOTE	
8:30pm-10:00pm	Raffle Drawing / Certificate Awards	Auditorium
	MUST BE PRESENT TO WIN	Additorium
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	<b>SUNDAY- JULY 15, 2018</b>	
7:00-10:30am	Sunday Morning Breakfast	Visitor Center
		Starlight Café

## **HOLD THE DATE FOR STAR QUEST XVI:**

NAME – Keynote WEDNESDAY- JULY 11, 2018 7:00 pm – 8:00 pm BIO



Caitlin is a graduate of West Virginia University with B.S. degrees in Geology and Physics with an emphasis in Astrophysics. Her Ph.D. research at the University of Arkansas includes cryo-geology and spectroscopy of Pluto and also works as a consultant on Martian mineral spectroscopy. She is the manager of the Pluto Lab at the WM Keck Laboratory for Planetary Simulations.

#### DR. FELIX J. "JAY" LOCKMAN – Keynote

THURSDAY- JULY 12, 2018 7:00 pm – 8:00 pm BIO

#### **PICTURE HERE**

Felix J. Lockman is the Principal Scientist at the Green Bank Observatory, a radio astronomy observatory that is a facility of the U.S. National Science Foundation. He did his undergraduate work at Drexel University and received his Ph.D. from the University of Massachusetts at Amherst in 1979. His area of research is the structure and evolution of the Milky Way and nearby galaxies, with a special emphasis on radio observations of neutral hydrogen.

After a postdoctoral fellowship at the Carnegie Institution of Washington, Dr. Lockman joined the scientific staff of the National Radio Astronomy Observatory where he worked for many years. Dr. Lockman was project scientist for the Green Bank Telescope during its construction phase and then moved to the Green Bank Observatory where he was Director for six years. Dr. Lockman's research has involved studies of the ionized, neutral atomic, and molecular gas in the Milky Way and nearby galaxies. His research established the existence of an extended layer of neutral hydrogen in the Milky Way, and identified the direction in the sky with the least interstellar matter. He is currently studying the gaseous halos of the Milky Way and Andromeda galaxies, and the gas being expelled from the nucleus of our galaxy, using data from both ground-based and space observatories. He has published numerous articles in professional journals and has edited several books, including "Gaseous Halos of Galaxies" and "But It Was Fun: the first forty years of radio astronomy at Green Bank." His 1990 review article on hydrogen in the Milky Way, co-authored with Dr. John M. Dickey of the University of Tasmania, is the most cited publication in the history of the U.S. National Radio Astronomy Observatory.

Dr. Lockman regularly lectures to diverse audiences about radio astronomy and related topics. He has given colloquia at Universities and Observatories around the world. He has been interviewed numerous times in print, radio, TV, for webcasts, and film. He appears in director Werner Herzog's recent film "Lo and Behold: Reveries of the Connected World" to discuss the Green Bank Observatory. In 2013 he was elected as a Fellow of the American Association for the Advancement of Science in recognition of his significant studies of neutral hydrogen in our galaxy and others, and for service to U.S. radio astronomy.

#### **DUNCAN LORIMER – Keynote**

FRIDAY- JULY 13, 2018 7:00 pm – 8:00 pm BIO



Bio sketch: Duncan Lorimer got his PhD in 1994 for his contributions to Pulsar Astronomy from the University of Manchester in the UK working under the supervision of Prof. Andrew Lyne, Dick Manchester and Matthew Bailes. Since then he has held positions at the University of Manchester (Lecturer; 1994-5); the Max-Planck-Institute for Radio Astronomy (Postdoctoral Fellow; 1995-8); Cornell University (Postdoctoral Fellow; 1998-2001); University of Manchester (Royal Society Research Fellow; 2001-6) and West Virginia University (Faculty; 2006-present). He is a Fellow of the Royal Astronomical Society since 1994. While at West Virginia University, he has received a Cottrell Scholar Award (2008-present) from the Research Corporation for Scientific Advancement and has received both his College and University's recognition for excellence in teaching (2009, 2010). He is currently Associate Chair of the Department of Physics and Astronomy. Among his notable research achievements are his contributions to our understanding of the population of pulsars and the discovery of Fast Radio Bursts which he will describe in this talk.

### BRIONY HORGAN – Keynote SATURDAY- JULY 14, 2018 7:00 pm – 8:00 pm BIO



Briony Horgan is an Assistant Professor in the Department of Earth, Atmospheric, and Planetary Sciences at Purdue University. She is a Participating Scientist on NASA's Mars Science Laboratory rover mission and a Co-I on NASA's upcoming Mars 2020 rover mission, the first step toward Mars Sample Return. Briony's research group uses mineralogy data from NASA satellites and rovers, along with lab and field work back on Earth, to understand the geologic history of Mars and the Moon. Briony received her BS in Physics from Oregon State University in 2005 and her PhD in Astronomy and Space Sciences from Cornell University in 2010, and then was an Exploration Postdoctoral Fellow at Arizona State University until joining Purdue EAPS in 2014.

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