4TH ANNUAL

PROJECT FIBONACCI® STEAM LEADERSHIP CONFERENCE

project FIBONACCI® FOUNDATION, INC.

JULY 28–AUGUST 3, 2019

ROME, NY & SURROUNDING MOHAWK VALLEY VENUES

COLONIZING & EXPLORING MARS

OUR MISSION

To introduce our youth to a culture of interdisciplinary STEAM learning, teaching them to become creative, independent leaders of community resurgence.

project FIBONACCI® FOUNDATION, INC.

OUR VISION

Enriched STEAM Communities Driving a Modern Renaissance

@PROFIBONACCI

#2019PROFIB

WELCOME FROM THE 2019 CHAIRPERSONS

It is our pleasure as the chair and co-chair of the fourth annual Project Fibonacci® STEAM Leadership Conference to welcome another cohort of bright, enthusiastic and creative STEAM Scholars! Along with the Project Fibonacci® "core team", comprised of Amy Singletary, Jessica Griffin, Dan Kostelec, Pam Mandryck, Evan Drozd, Andrew Burger, Michelle Minicozzi, and Founder Andy Drozd, we have been working hard for the past year to top the previous three conferences and make this year's conference the best of its kind anywhere!

For those new to Project Fibonacci® or the summer STEAM Leadership Conference:

The Project Fibonacci® Foundation, Inc., which hosts the summer conference, has as its mission to introduce youth to a culture of interdisciplinary STEAM learning, assisting them in becoming creative, independent leaders of community resurgence. Now in our fourth year, Project Fibonacci® accomplishes this by providing immersive learning programs on various STEAM topics to students, teachers, and community members. Working in conjunction with schools, businesses, non-profit organizations, and experts in the varied STEAM fields, Project Fibonacci® uses STEAM education as a catalyst and driver for workforce preparedness and economic development.

The week-long Project Fibonacci® STEAM Leadership Conference, the centerpiece of our endeavors, is complemented by intensive innovation camps on the topics of drones, robotics, and coding; internships; sponsorship of competitive STEAM events such as the IEEE/EPICS STEAM Challenge; and a speaker series featuring STEAM experts of international renown.

For this year's conference, we have integrated STEAM into an investigation of The Red Planet. The overarching question is, "How could Mars, our planetary neighbor believed to possess the conditions to support life, be a suitable alternative to Earth as a second home for humans?"

Scholars will work to develop proposals for transportation systems enabling travel between our two worlds; for the exploration of Mars by the first humans to set foot on Mars; and for the habitats, food supplies, government, and economy of the first permanent Martian colony. As was the case at past conferences, scholar teams will present their proposals at Saturday's STEAM Fair to an audience of parents, visitors, community members, sponsors, and professional judges. Workshops, off-site tours, and other learning events and "edutainment" will round out the week. In the subsequent pages of this program you will find many details about the planned experiences of this year's conference. Take the time to browse and ponder what your summer and future may hold. We hope that the 2019 Project Fibonacci® STEAM Conference Leadership will inspire you to new heights!

On behalf of the Steering Committee, the 2019 team of facilitators, our army of volunteers, and all involved in this summer's conference, we look forward to welcoming this year's STEAM Scholars, those new to the summer conference and alumni alike!

Full STEAM Ahead!

Maria Smith

B.S., M.S Ed., M.A., C.A.S

2019 STEAM Leadership Conference Chair

Educational Programs Advisor, Board Member

Robert Bojanek

2019 STEAM Leadership Conference Co-Chair

Board Member

STEERING COMMITTEE MEMBERS

Andrew Drozd

Project Fibonacci® Chairman
& Executive Director

Maria Smith

2019 Conference Chair

Educational Programs Advisor

Robert Bojanek

2019 Conference Co-Chair
Community Outreach

Tom Benjamin

ANDRO
Treasurer

Andrew Burger

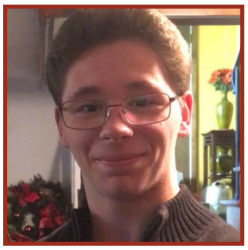
FIRST Robotics
Technical Support &
Innovation Expert

Beth Debany

VVS (Retired)
Curriculum

Orlando Destito

Local Logistics &
Transportation



Evan Drozd

STEAM Scholar
Advisory Board

Tim Gaffney

Oriskany CSD
Curriculum

Jessica Griffin

ANDRO
Workshop Coordinator

Martha Group

VVS
Curriculum

Mackenzie Hardin

STEAM Scholar
Advisory Board

Dan Kostelec

Project Fibonacci®
STEAM Outreach Coordinator

Pam Mandryck

ANDRO
Technical Writer & Secretary

STEERING COMMITTEE MEMBERS

Tamalin Martin

Camden CSD, Ret.
Assistant Volunteer Coordinator

Nathan McDonald

Research Scientist
Curriculum

Michelle Minicozzi

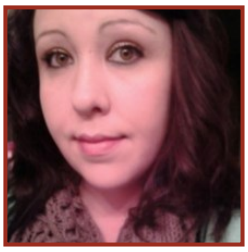
Digital Marketing &
Fundraising

Julia Pilny

BAH, retired
Arts & Sciences Curriculum

Louise Rutherford

Camden CSD
Curriculum



Amy Singletary

ANDRO
General Administrator

Ramona Smith

City of Rome Council Woman
Curriculum

Tim Thomas

MVCC
Curriculum

John Vanella

Conference Direct
Conference Management

Deb Van-Slyke

Clinton CSD
Curriculum

Barbara Welch-Drozd

Volunteer Coordinator

Dr. Mitchell Wilbert

Community Outreach

NOT PICTURED:

Sheena Ambrocio, Outreach
Jean Burgdorf, Community Outreach
Christie Harrington, Curriculum
Melissa Lowell, Curriculum
Mary-Jo Post, Volunteer

Bryant Wysocki Ph.D.

Research Scientist
Curriculum

STEAM TEAM FACILITATORS

Mary Swerediuk

Retired Elementary School Teacher

Kevin Morrisroe

Teacher at Notre Dame

Peter Yaginski

US Air Force, Retired

Member of MVAS

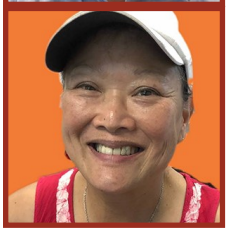
Deb Van Slyke

Director of Curriculum,

Clinton CSD

Joel Seif

Engineer at Periton Corp. & AFRL, Member of MVAS



Carol Wojdyla

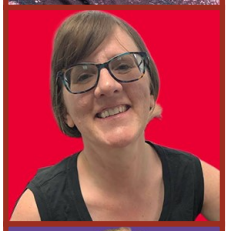
Nuclear Physicist, Retired Chemistry Teacher

Jeff Smith

Self-Employed, Owner of JDS Custom Builders

Julia Pilny

Artist, Musician, Retired BAH – Computer Science



Tamalin Martin

Camden CSD, Ret.

Penny Mann

Science Teacher, Oriskany CSD

Joan Seif

Pharmacist

Jim Dulak

Retired Process Engineer, IBM

Member of MVAS

Gordon Fesenger

US Air Force, Retired Systems Engineer Meteorologist,

Member of MVAS

ADDITIONAL FACILITATORS:

Margaret Jevens: Violin Teacher at Rolling Strings, Retired Teacher (RFA)

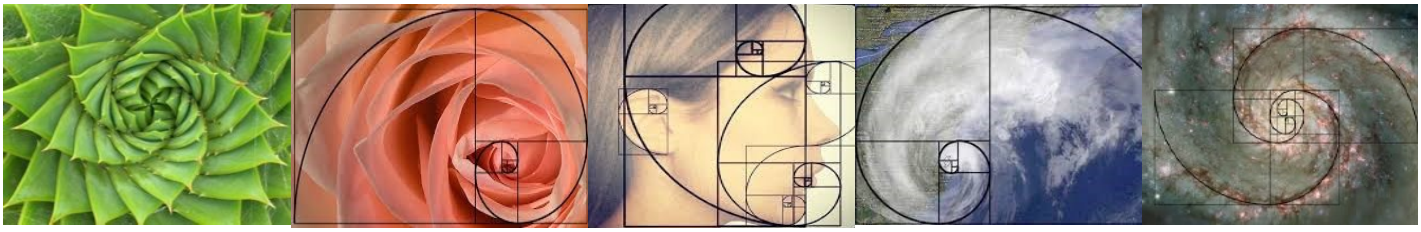
Marie DiCristofaro–Smith: Science Teacher at Burnt Hills CSD

Nathan McDonald: Research Scientist

WHO WAS FIBONACCI?

Project Fibonacci® has been inspired by the renowned mathematician, Leonardo Bonnaci, later nicknamed “Fibonacci” by his contemporaries and historians.

During the 13th Century, Fibonacci “discovered” a branch of mathematics that neatly describes emergent patterns we often encounter in science, engineering, nature, art, music and elsewhere throughout the cosmos.



The Fibonacci sequence is a series of numbers in which a number is found by adding the two numbers before. Starting with 0 and 1, the sequence will then be 0, 1, 1, 2, 3, 5, 8, 13, 21, 34 and so forth.

2019 EPICS IN IEEE CHALLENGE

EARN UP TO $10,000

IN PROJECT DEVELOPMENT FUNDING!

The Project Fibonacci® Foundation, Inc. in coordination with the IEEE Engineering Projects in Community Service (EPICS), is hosting a unique, one-of-a-kind STEAM Challenge. Current 2019 Project Fibonacci® STEAM Conference scholars, past scholars and students who have participated in previous Project Fibonacci programs are invited to look into the Smart Cities of the future and propose ways in which the future they envision can have a positive impact in our community today.

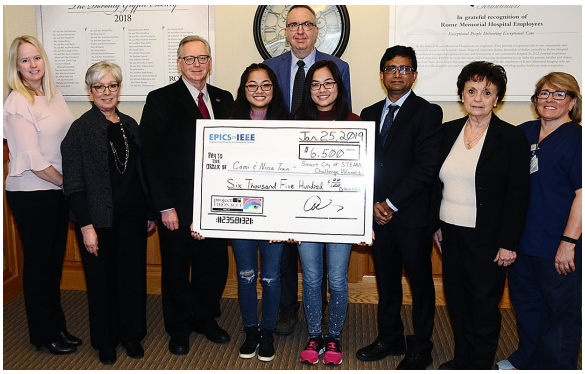
EPICS IN IEEE
Engineering Projects In Community Service

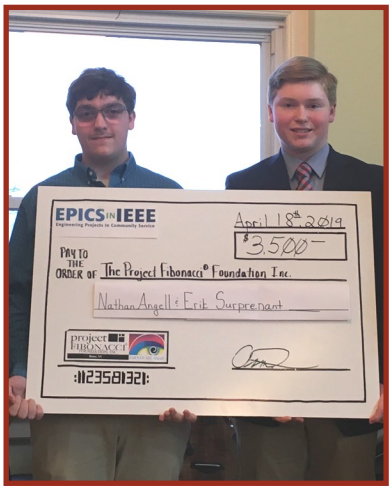
MEET THE 2018 WINNING TEAMS

1st Place: Nina & Cami Tran

3D Printed Lymphedema Shoe

Earned $6,500 in Funding &
$4,000 in College Scholarships!





2nd Place: Nathan Angell & Eric Surprenant

Robotic Auto Tuner

Earned $3,500 in Funding

Learn more at ProjectFibonacci.org

CAMPUS MAP

1. Conference Center– Daily Activities, Workshops, Keynotes
2. Tent Area– Special Events, Friday BBQ
3. Pool- POOL IS **ONLY** OPEN WHEN THERE IS A LIFEGUARD ON DUTY

   8:00-9:30am– Monday, Tuesday & 8:00-10:00pm– Wednesday, Friday
4. Inn– Hotel, Computer Lab & Movie Room , Medic Stations

ON-SITE SECURITY: Cosnett & Associates Investigations

ON-SITE MEDICS: Local Certified Medic Core EMTS

EMERGENCY CONTACTS

Andrew Drozd (315) 335-1238

Dan Kostelec (570) 604-7299

DIAMOND+ SPONSOR

The Project Fibonacci® Foundation, Inc. is beyond grateful for the continued support of the Community Foundation of Herkimer & Oneida Counties, Inc.

THE FOUNDATION

Their generous contribution of $25,000 was rewarded to students throughout Herkimer and Oneida Counties to cover their tuition to attend the 4th Annual Project Fibonacci® STEAM Leadership Conference. We can't thank the Foundation enough for their continued support in our mission of using STEAM education as a catalyst for workforce preparedness & economic development.

For More Information, Visit:

https://foundationhoc.org/

COLONIZING & EXPLORING MARS

PROPOSAL FOR MARS DETAILS

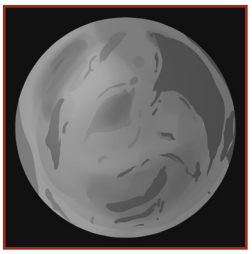
Five competing Color teams (Red, Orange, Yellow, Green, Purple) will consist of three "Proposal Teams"; consisting of Astro Engineers, Explorers and Martian Colonists. Proposal Teams will respond to questions about the major task associated with their role.

ASTRO ENGINEERS 2019—2030+

DESCRIBE A TRANSPORTATION SYSTEM THAT OPERATES BETWEEN EARTH & MARS TO FERRY EXPLORERS, COLONISTS, SPACE TOURISTS, GOODS, AND SUPPLIES BETWEEN THOSE TWO PLANETS

EXPLORERS 2030+

DESCRIBE THE FIRST PERMANENT MARS BASE WHICH WILL BECOME THE HUB FOR EXPLORATION OF THE RED PLANET



MARTIAN COLONISTS 2050+

DESCRIBE THE FIRST SELF-SUSTAINING SPACE COLONY ON MARS AND HOW A HUMAN CIVILIZATION WILL BE SUSTAINED ON MARS

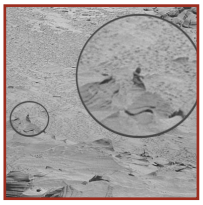
Color teams will work to create a coherent proposal based upon what is learned from keynote presenters, workshop instructors, and their own research and collaborative efforts. During the week each Proposal Team will:

- Prepare models, posters, and/or digital depictions of their proposals
- Record their ideas and progress on video
- Prepare a two-minute "elevator pitch" about their proposal and integrate it into the other two for their Color Team

On Saturday, Color Teams will present their proposals at the STEAM Fair. Judging will be based on the integrated Color Team presentations. The winning Color Team will have its three-part proposal turned into a video for future publication by the Project Fibonacci® Foundation.

COLONIZING & EXPLORING MARS

KEYNOTE & WORKSHOP PRESENTERS WILL HELP ANSWER THE FOLLOWING "BIG QUESTIONS"



What is the planet Mars like and how does it compare to Earth?

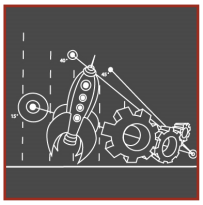
How do we know what we know about Mars?

Is there life on Mars?

Why would we want to send humans to Mars?

Why would we want to colonize Mars?

What are the effects on the human body of long-term space travel, radiation, and lower gravity?



How will the Mars space crews be selected?

What are the current proposals for getting astronauts to Mars?

What will the first humans to set foot on Mars encounter?

What is needed in order to live on Mars?

What is terraforming?

COLONIZING & EXPLORING MARS

PRESENTORS & EXPERTS INCLUDE:

Jennifer Herzog

IT'S THE END OF THE WORLD AS WE KNOW IT:
CAN LIFE BE SUSTAINED ON MARS?
Assistant Professor, Biology, HCCC

Dr. Valerie Rapson

PUTTING HUMANS ON MARS
Outreach Astronomer, miSci

Nathan McDonald

ANTARCTICA: THE GREAT ALONE
Research Scientist

Dr. Bryant Wysocki, Ph.D.

SOVIET RACE FOR THE MOON
Chief Engineer/ Research Scientist

Marie DiCristofaro

MARS LABS
Educator, Burnt Hills/Ballston Lake CSD (Ret.)

Robert Bojanek

FUNDING A MISSION TO MARS
The Shoreline Group

COLONIZING & EXPLORING MARS

PRESENTERS:

Jeffrey Montes

ARCHITECTURE BEYOND EARTH

Jeffrey is the Chief Space Architect and Head of Space Technology at SpaceFactory, Inc., where he developed the habitat "Marsha", awarded four times by NASA including 1st place in the finale of the 3D Printed Habitat Challenge. His work at SpaceFactory, Inc. has helped make the New York-based company a leader in the nascent field of habitat design and autonomous construction. He has worked on proposals across the fields of architecture, spacecraft and exploration robotics and excels at finding opportunities for design excellence in technical systems governed by engineering constraints.

Gary Ford

LESSONS LEARNED & LEASONS LOST
Rome CSD Ret.

Dr. Joe Levy

HOW TO PICK A LANDING SITE

Geomorphologist & Planetary Scientist, Colgate University

Christina Carambia

INDOOR GROWING

Founder of Underground Greens

Jessica Harris

COLONIZING MARS THROUGH 8 WELLNESS DIMENSIONS

Professor of Health Promotion & Wellness, SUNY Oswego

Kevin Morrisroe

ETHICAL CONCERNS IN SPACE EXPLORATION

Notre Dame Jr./Sr. High School

FOUNDER & PRESENTING SPONSOR OF THE PROJECT FIBONACCI® FOUNDATION,INC.

ANDRO

Innovation...From Research to Systems!

Main Office:

One Beeches Place • 7980 Turin Road, Bldg. 1

Rome, NY 13440-1934

Syracuse Office:

CNY Biotech Accelerator • 841 E. Fayette Street

Syracuse, NY 13210

www.androcs.com (315) 334-1163

ANDRO Computational Solutions, LLC is a scientific research & development company supporting defense and commercial markets. ANDRO is a leader in developing emerging prototypes for cyber-secure RF communications, command and control (electromagnetic spectrum management, cognitive radios) including multisensory resource management for radar target tracking and related applications. ANDRO is also a strong proponent of STEAM education as a catalyst for workforce and economic development.

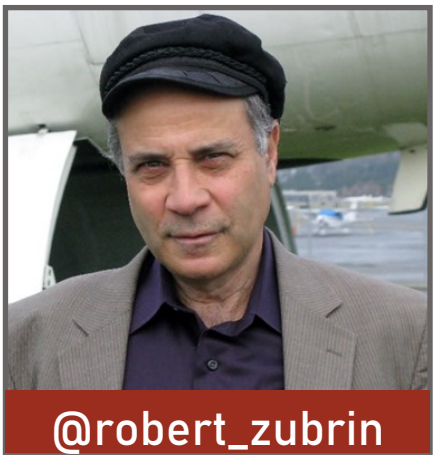
AndroMetaX Inc.

ANDROMetaX, Inc., provides Spectrum Management as a Service (SMaaS) including wireless cyber-secure solutions for the federal and civilian Internet of Things (IOT) marketplace:

- Unmanned Air Systems (UAS) RF Sense & Avoid
- Autonomous Systems & Vehicles
- "Big (Spectrum) Data" Processing
- Medical Technologies & Wearable Biosensors
- Brain-Computer-Interface (BCI) Applications
- Medical Image Feature/Anomaly Detection, Image Analysis & Classification

*EVENING KEYNOTES ARE OPEN TO THE PUBLIC TICKETS AVAILABLE AT EVENTBRITE.COM

ROBERT ZUBRIN



@robert_zubrin

Author, Aerospace Engineer & President of Pioneer Astronautics

2:30PM KEYNOTE: THE CASE FOR SPACE

6:30PM KEYNOTE: MARS DIRECT- HUMANS TO THE RED PLANET WITHIN A DECADE

Robert Zubrin, formerly a Staff Engineer at Lockheed Martin Astronautics in Denver is now president of his own company, Pioneer Astronautics. He holds Masters degrees in Aeronautics and Astronautics and a doctorate in Nuclear Engineering from the University of Washington. He is the inventor for over 15 US patents for technologies in the field of space propulsion, exploration, and energy, the author of over 200 published technical and non-technical papers in the field, as well as the non-fiction books such as "The Case for Mars: The Plan to Settle the Red Planet and Why We Must", "Entering Space" and "Mars on Earth." His most recent work is "The Case for Space: How the Space Revolution Opens a Future of Limitless Possibility."

He is a Fellow of the British Interplanetary Society and former Chairman of the Executive Committee of the National Space Society. He is the founder of the Mars Society; an international organization dedicated to furthering the exploration and settlement of Mars by both public and private means. In that capacity, he personally led the construction and operation of a human Mars exploration training station on Devon Island, an uninhabited island in the Canadian Arctic 900 miles from the North Pole. Prior to his work in astronautics, Dr. Zubrin was employed in areas of thermonuclear fusion research, nuclear engineering, radiation protection, and as a high school science teacher.

6:10PM SPECIAL INTRODUCTION STEAM-TED TALK:

LEADERSHIP & INNOVATION OF THE FUTURE

Col. Timothy Lawrence, Ph.D.

Director, Air Force Research Laboratory Information Directorate, Rome, NY

DIAMOND+ SPONSOR

The Project Fibonacci® Foundation extends our greatest appreciation to the Shoreline Group for their continued support for our mission to introduce our youth to a culture of interdisciplinary learning, teaching them to become creative, independent leaders of community resurgence.

The Shoreline Group

The Shoreline Group has supported the tuition of students from across CNY to attend current and past Project Fibonacci® STEAM Conferences as well as STEAM educational opportunities throughout the year.

Thank you to the Shoreline Group for their continued support!

project FIBONACCI® FOUNDATION, INC.

*EVENING KEYNOTES ARE OPEN TO THE PUBLIC TICKETS AVAILABLE AT EVENTBRITE.COM

@AprilleEricsson

DR. APRILLE ERICSSON

Aerospace Engineer, NASA

@AprilleEricsson

6:30PM KEYNOTE: JOURNEY TO MARS

Dr. Aprille J. Ericsson is an Aerospace Engineer, who has held numerous positions in education, technically and athletically. While attending the Massachusetts Institute of Technology (MIT) she worked in the Space Systems Laboratory and worked on a fiber optic gyroscope in the Physics Laboratory. Dr. Ericsson's early research at Howard University (HU) was developing control methods for orbiting large space platforms like International Space Station. She has served as an Adjunct Faculty member at several Universities. Currently, she sits on Engineering Academic boards at the National Academies, and MIT and previously at HU as a Trustee and as the Chair of the HU Middle School of Mathematics and Science.

During her 25+ year tenure with NASA, Dr. Ericsson has worked as Aerospace Engineer, Technologist, Project and Program Manager and Executive. In 2017, she assumed the position of New Business Lead for the NASA GSFC Instrument Systems and Technology Division. Just prior, she served as the Capture Manager for a proposed Astrophysics mid-sized Class Explorer, called STAR-X. Prior to that proposal development, Dr. Ericsson served as the GSFC Program Manager for SBIR/STTR. Formerly, she served as the Deputy to the Chief Technologist for the Applied Engineering and Technology Directorate. As an Instrument Project Manager, she has led spaceflight instrument teams and proposal developments for instruments ranging from $15M to $500M. As an Attitude Control Systems analyst, Dr. Ericsson developed practical control methods, and analyzed structural dynamics for several space science missions. She served as a NASA HQs Program Executive for Earth Science and a Business Executive for Space Science.

Dr. Ericsson is also an athlete. Throughout her life she has competed in basketball, flag football and softball. She played on nationally ranked softball teams which have won two Coed Worlds, numerous State Championships, and a Women's military World tournaments. She has been voted women's MVP for coed flag football. Dr. Ericsson's dedication to youth has also continued as a basketball, softball, baseball and T-ball Coach. She also enjoys skiing, tennis and cycling for fun.

GOLD SPONSORS

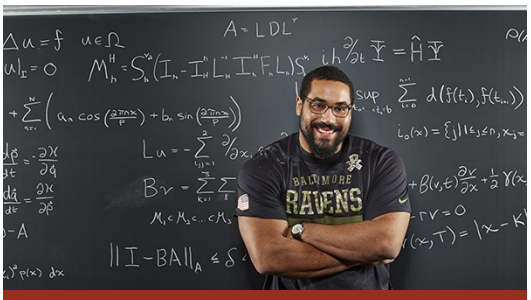
nationalgrid

project FIBONACCI® FOUNDATION, INC.

SPEAKERS SERIES THURSDAY, AUG 1

*EVENING KEYNOTES ARE OPEN TO THE PUBLIC TICKETS AVAILABLE AT EVENTBRITE.COM

JOHN URSCHEL

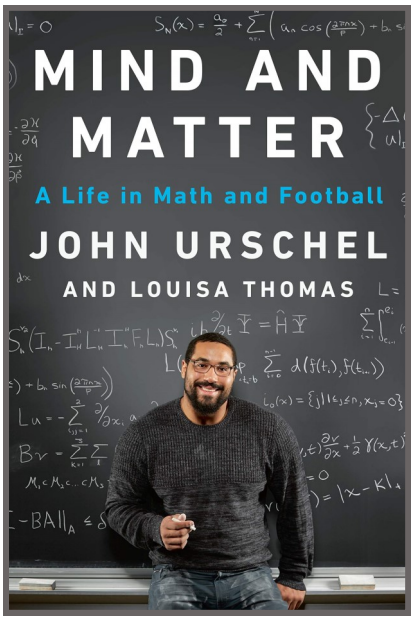


@JohnCUrschel

Author, Mathematician & Former NFL Player,

WORKSHOP: THE HEXAGON THEOREM

6:30PM KEYNOTE: THE BEAUTY OF MATHEMATICS



For John Urschel, what began as an insatiable appetite for puzzles as a child developed into mastery of the elegant systems and rules of mathematics. By the time he was thirteen, Urschel was auditing a college-level calculus course. But when he joined his high school football team, a new interest began to eclipse the thrill he felt in the classroom. Football challenged Urschel in an entirely different way, and he became addicted to the physical contact of the sport. After he accepted a scholarship to play at Penn State, his love of math was rekindled. As a Nittany Lion, he refused to sacrifice one passion for the other. Against the odds, Urschel found a way to manage his double life as a scholar and an athlete. While he was an offensive lineman for the Baltimore Ravens, he simultaneously pursued his PhD in mathematics at MIT.

Weaving together two separate narratives, Urschel relives for us the most pivotal moments of his bifurcated life. He explains why, after Penn State was sanctioned for the acts of former coach Jerry Sandusky, he declined offers from prestigious universities and refused to abandon his team. He describes his parents' different influences and their profound effect on him, and he opens up about the correlation between football and Chronic Traumatic Encephalopathy (CTE) and the risks he took for the game he loves. Equally at home discussing Georg Cantor's work on infinities and Bill Belichick's playbook, Urschel reveals how each challenge—whether on the field or in the classroom—has brought him closer to understanding the two different halves of his own life, and how reason and emotion, the mind and the body, are always working together. "So often, people want to divide the world into two," he observes. "Matter and energy. Wave and particle. Athlete and mathematician. Why can't something (or someone) be both?"


Create
THE THINGS YOU WISH EXISTED.
ais
AINFOSEC.COM

*EVENING KEYNOTES ARE OPEN TO THE PUBLIC TICKETS AVAILABLE AT EVENTBRITE.COM

@ScienceBob

"SCIENCE BOB" PFLUGFELDER

Teacher, Maker & Author

7:00PM SPECIAL PRESENTATION:

THE SCIENCE OF BEING A MAKER

"Science Bob " Pflugfelder is a science teacher, maker, author, and presenter that knows how to make the world of science come alive in a big way. He regularly inspires a love a science and making on ABC's Jimmy Kimmel Live, Live With Kelly & Ryan, and The Dr. Oz Show. He has also appeared on Join Or Die With Craig Ferguson, Good Morning America, The Today Show, and others as well as guest starring as himself on several episodes of Nickelodeon's Nicky, Ricky Dicky, & Dawn. Bob has also appeared on television internationally in Japan, Rome, and Singapore.

His popular "Nick & Tesla" aims to inspire young readers to use science to invent and innovate. The book series has been translated into7 different languages and was nominated for a prestigious Edgar Award from the Mystery Writers of America.

SPECIAL THANK YOU

MEDIA SPONSOR:

NEWS Channel 2 WKTV Utica

INTERNET PROVIDER:

Northland COMMUNICATIONS

TECHNICAL SERVICES PROVIDER:

CISCO™

EQUIPMENT DONOR:

BME Office solutions made simple.

SPECIAL EVENTS

MONDAY 9:00PM

PRIVATE STARGAZING SESSION

Join the Mohawk Valley Astronomical Society & Keynote Robert Zubrin for a private star-gazing session

Rain Date: Tuesday, July 30th

MOHAWK VALLEY ASTRONOMICAL SOCIETY
Public Stargazing
Monthly Programs
info@mvas-ny.org
mvas-ny.org
MVAS

TUESDAY & THURSDAY 9:30PM

PARANORMAL INVESTIGATIONS

Rome Investigators of the Paranormal (RIP) are back with an exclusive paranormal investigation at a very familiar location.

Space is limited!

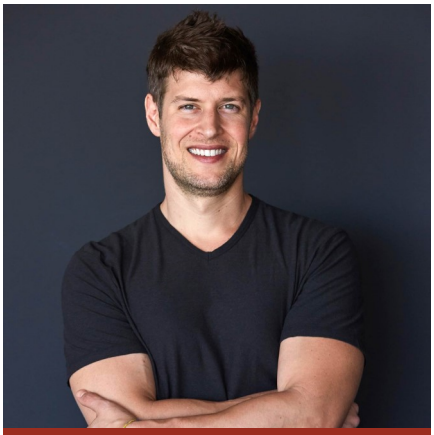
WEDNESDAY 8:30PM

DRUM CIRCLE NIGHT: BLOW OFF SOME STEAM!

Drum circles or community drumming has played an important role in communication and culture building or hundreds of years. Come join the intoxicating release of energy and fun of a finely facilitated drum circle to engage all as a release of discovery of its connection to STEM.

SPECIAL EVENTS

THURSDAY 1:30



@maxlugavere

MAX LUGAVERE

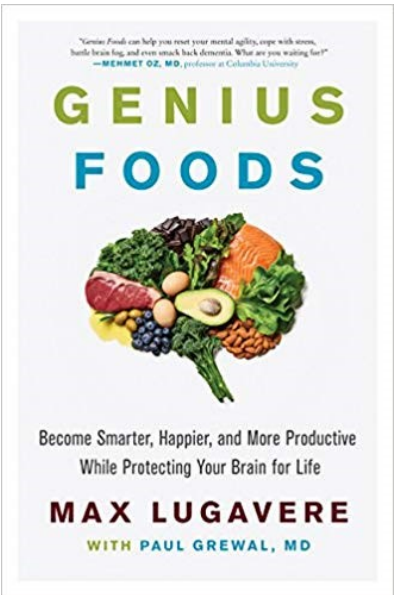
TV Personality, Health and Science Journalist & Author of the New York Times bestseller– "Genius Foods"

1:30PM SPECIAL PRESENTATION:

GENIUS FOODS IN SPACE– THE ESSENTIAL FOODS FOR OPTIMAL BRAIN FUNCTION

Max Lugavere is a filmmaker, health and science journalist and the author of the New York Times best-selling book Genius Foods: Become Smarter, Happier, and More Productive While Protecting Your Brain for Life. He is also the host of the #1 iTunes health podcast The Genius Life.

Lugavere appears regularly on the Dr. Oz Show, the Rachael Ray Show, and The Doctors. He has contributed to Medscape, Vice, Fast Company, CNN, and the Daily Beast, and has been featured on NBC Nightly News, The Today Show, and in The Wall Street Journal. He is a sought-after speaker and has given talks at South by Southwest, TEDx, the New York Academy of Sciences, the Biohacker Summit in Stockholm, Sweden, and many others.



WAKE-UP WORKSHOPS

MONDAY JULY 29 & TUESDAY JULY 30 8:30-9:45

YOGA

Start your day with Nicole from Just Breathe Yoga. Learn basic postures that will show attention to proper alignment, focused breathing, and general body awareness.

TAI CHI

Join Sensei Laura of Bailey's Karate Schools, Inc. for an introduction to tai chi. Originally developed for self-defense, tai chi has evolved into a graceful form of exercise that's now used for stress reduction and a variety of other health conditions. Often described as meditation in motion, tai chi promotes serenity through gentle, flowing movements.

OPEN SWIM

Weather permitting. Please Note: STEAM Scholars are only allowed to swim when a lifeguard is on duty. For a list of times the pool is open, visit page 9

PLEASE DRESS APPROPRIATELY FOR WAKE-UP WORKSHOPS

DON'T BE LATE! THE MARS BLOCK STARTS AT 10:00AM

MONDAY-FRIDAY SCHEDULE BREAKDOWN*

8:00-9:00 AM

BREAKFAST

8:30-9:45AM

WAKE-UP WORKSHOPS (MONDAY, TUESDAY)

10:00-12:30PM

MARS BLOCK: WORKSHOPS & PRESENTATIONS

STEAM WORKSHOPS

12:30-1:30PM

LUNCH

1:30-5:00PM

MARS BLOCK: WORKSHOPS & PRESENTATIONS

PROPOSAL FOR MARS DEVELOPMENT

5:00-6:15PM

DINNER & TOWNHALL (TOWNHALL STARTS AT 6:00PM)

6:30-8:00PM

KEYNOTE SPEECH

(MERCHANDISE IS AVAILABLE FOR PURCHASE, LIMITED BOOK SIGNING)

8:00-10:00PM

PROPOSAL FOR MARS DEVELOPMENT

SOCIAL OPTIONS

MOVIE ROOM

*Schedule is Subject to Change

COLLEGE & CAREER EXHIBITORS

WEDNESDAY 9:00-11:30AM

Visit our growing list of exhibitors to be inspired on career paths and educational opportunities. Learn first-hand what experience and degree you would need to pursue to achieve your dreams. Complete mock-interviews and resumé building workshops to help you succeed in your future endeavors. Fill out our College & Career Fair Passport for a chance to win a great prize!

EXHIBITORS INCLUDE:

- New York State Police
- Assured Information Security (AIS)
- Cyromech, Inc.
- Jervis Library
- LeMoyne College
- Munson Williams Proctor Art Institute
- Nazareth College
- SUNY Fulton
- ANDRO Computational Solutions, LLC
- Utica College
- TACNY

project FIBONACCI® FOUNDATION, INC.

WEDNESDAY OFF-SITE TOURS

OPTION 1: MUNSON WILLIAMS PROCTOR ARTS INSTITUTE

Munson-Williams-Proctor Arts Institute is a fine arts center dedicated to serving diverse audiences by advancing the appreciation, understanding, and enjoyment of the arts. The art institute aims to promote interest and participation in the arts and stimulate artistic self-expression and personal creativity. MWPAI continues to assume a leadership and advocacy role for the arts in Utica, NY.

OPTION 2: MVCC FABLAB

MVCC
MOHAWK VALLEY COMMUNITY COLLEGE

The FABLab is part of MIT's global FABLab network, and MVCC was the first college in New York State to have an MIT-networked FABLab.

The FABLab at MVCC is open to students, the community, and local businesses. The lab serves many different purposes, including: providing a place where students can design and build projects while being able to participate in all phases of standard production processes; providing local businesses with the latest design and rapid prototyping technologies to be able to develop new products and improve existing products for the market; giving community members an opportunity to learn the latest technologies and a place to develop their ideas or inventions; and providing Central New York with a workforce that has been trained using the latest high-tech fabrication equipment and electronic tools.

WEDNESDAY OFF-SITE TOURS

OPTION 3: FORT STANWIX NATIONAL MONUMENT

Known as "the fort that never surrendered," Fort Stanwix, under the command of Col. Peter Gansevoort, successfully repelled a prolonged siege, in August 1777, by British, German, Loyalist, Canadian, and American Indian troops and warriors commanded by British Gen. Barry St. Leger. The failed siege combined with the battles at Oriskany, Bennington, and Saratoga thwarted a coordinated effort by the British in 1777, under the leadership of Gen. John Burgoyne, to take the northern colonies, and led to American alliances with France and the Netherlands. Troops from Fort Stanwix also participated in the 1779 Clinton-Sullivan Campaign and protected America's northwest frontier from British campaigns until finally being abandoned in 1781.

OPTION 4: FORT RICKEY DISCOVERY ZOO

Located in Rome, NY, Fort Rickey offers engaging animal interactions with fun activities for all ages. Along with exhibits of native and exotic animals, Fort Rickey offers hands-on animal shows, a petting zoo with tame deer, and a maternity ward for baby goat cuddling.

FORT RICKEY
Children's Discovery Zoo

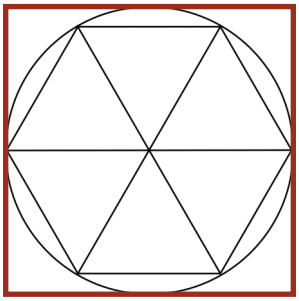
Fort Rickey is committed to the belief that those who experience the joy of kind and gentle interaction with animals are more likely to become adults who care about wildlife and conservation. They strive to provide the highest quality care for their animals while providing the best in healthy, outdoor entertainment and education.

THURSDAY STEAM WORKSHOPS

THE HEXAGON THEOREM

9:30-11:00AM

John Urschel



Interested in calculus? Join keynote speaker John Urschel as he digs into the Hexagon Theorem and highlights the beauty of mathematics!

ALL THE WORLD'S A STAGE

9:00-10:00AM
10:15-11:15AM

Janet & Rod Foote

Through theatre games and exercises STEAM Scholars will learn acting skills that are effective onstage and off. Further develop your communication skills, quick thinking and self confidence in this fun workshop that will interest those who want to perform onstage as well as those who want to perform will in classroom, social and interview situations.

USING RHYTHMIC ENGAGEMENT

9:00-10:00AM
10:15-11:15AM

FOSTERING SEEDS OF COMMUNITY & CONVERSATION WITHOUT SAYING A WORD

Lead with Rhythm

PLAY. Play is not unusual to animals, especially humans. But what we take away from play is perhaps more important than the act, which is also therapeutic. Come find out how your interaction with yourself and others can influence your personal approach to participation, learning, memory, academics, home and family. And we probably won't even say a word….

THURSDAY STEAM WORKSHOPS

SCIENCE OF THE PARANORMAL

9:00-10:00AM
10:15-11:15AM

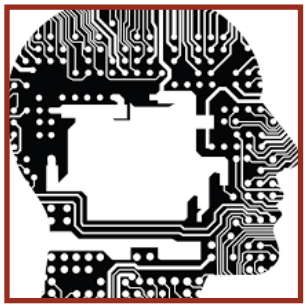
Dr. David DeProspero, Ph.D., Peter Leonard, Rich Nikodem

People and religions all over the world acknowledge the existence of other-worldly forces that interact with us in our perceived reality. Does paranormal activity really exist? Why do people feel cold spots, or see things out of the corner of their eye? How is a paranormal investigation actually conducted, and what technology is used to aid the investigators. Join us for an in-depth scientific look into the world of the paranormal, and find some answers to your deepest questions.

SPATIAL REASONING CAN BE IMPROVED WITH PRACTICE

9:00-10:00AM
10:15-11:15AM

Ann Laird, MVCC



Increase your understanding of the importance of spatial intelligence in engineering and engineering technology professionals. Activities in this workshop will include brain training games, mental manipulation of objects, and drawing objects from different perspectives.

THURSDAY STEAM WORKSHOPS

FIBONACCI IN MOTION: KARATE

11:30-12:30PM

Sensei Brandon, Bailey's Karate Schools, Inc.

Join Sensei Brandon of Bailey's Karate for a brief history of American Karate to better understand the connection of Fibonacci in Martial Arts. STEAM Scholars will also learn a basic understanding of self-defense for confidence building and self-discipline.

THE SCIENCE OF SHAKESPEARE

11:30-12:30PM

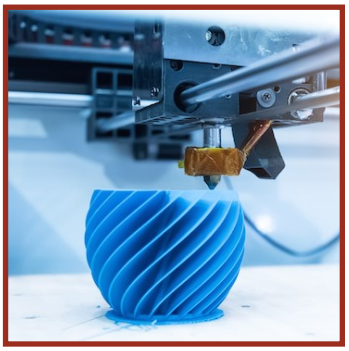
Dan Kostelec, Shakespeare Approves!

In the Science of Shakespeare, we will explore the connections between history's most famous playwright and the beginnings of the Scientific Revolution and, more broadly, how they reshaped society at large.

TECHNOLOGY IN ARTS

11:30-12:30PM

Mario Andrés Colón, Artist & Educator



Gain an understanding of 3-D printing, rapid prototyping and learn how to utilize design techniques with developing technologies. Join artist & educator Mario Andres Colon as he demonstrates the importance of aesthetics in engineering.

FRIDAY STEAM WORKSHOPS

THE BEAT OF COLONIZATION

9:00-10:00AM
10:15-11:15AM

Lead with Rhythm

Knowing the history and the repetitions of perhaps the one thing that defines not only populations but also decades. Music is essential to fostering new horizons as well as the colonization of another territory or even another planet. How can rhythms play a role in building culture?

BREAKOUT EDU– THE GREAT MARS ESCAPE

9:00-10:00AM
10:15-11:15AM

Sondra Whalen, VVS

How do you escape the red planet with a damaged rocket ship? STEAM Scholars will solve a series of clues, puzzles and riddles in a Breakout EDU style format using their knowledge in STEAM. Figure out the clues to save your crew and save the day!

FORENSICS

9:00-10:00AM
10:15-11:15AM

Alex Sypniewski, Jason Fairbrother, Shane Riolo

Join the Rome Police Department as they demonstrate crime scene processing, uses of equipment/ materials and explore advances in technology and laboratory technologies.

FRIDAY STEAM WORKSHOPS

PAPER QUILLING

11:30-12:30PM

Stephanie Ciotti

The art of paper quilling has been around for hundreds of years. Join artist Stephanie Ciotti as she teaches the practice of creating beautiful works of art with just paper and patience!

THE ART OF SCIENCE COMMUNICATION

11:30-12:30PM

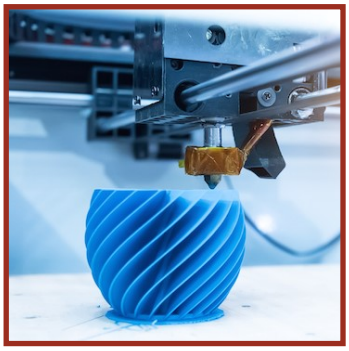
Dan Kostelec, The Project Fibonacci Foundation, Inc.

Using improv games, STEAM Scholars will learn to communicate with each other beyond using technical jargon. Taking emotional risks in a safe environment, students will work on presentation skills and learn to listen to each other for true communication.

TECHNOLOGY IN ARTS

11:30-12:30PM

Mario Andrés Colón, Artist & Educator



If you missed this workshop on Thursday, check it out Friday! Gain an understanding of 3-D printing, rapid prototyping and learn how to utilize design techniques with developing technologies. Join artist & educator Mario Andres Colon as he demonstrates the importance of aesthetics in engineering.

SUNDAY SCHEDULE* 7/28

TIME	ACTIVITY	LOCATION
11:00-2:30PM	STEAM Scholar Check-In Icebreakers	Inn Conference Center
3:00-4:30PM	Welcome Reception presented by The Shoreline Group Color Guard Welcoming Remarks: Andy Drozd, Project Fibonacci® Founder & Chairman of the Board Overview of the Week: Code of Conduct– Ramona Smith "Proposal for Mars" Introduction & The "Big Questions"- Maria Smith, 2019 Chairperson	Turin & Terrace
5:00-6:00PM	Dinner	Boardroom
6:00-7:00PM	It's the End of the World as We Know It: Can Life be Sustained on Mars? - Jennifer Herzog, HCCC	Turin & Terrace
7:00-8:00PM	Team Challenge: STEAM Walk	
8:30-10:00PM	Social Activities/Free Time	Inn

*Schedule is Subject to Change

MONDAY SCHEDULE* 7/29

TIME	ACTIVITY	LOCATION
8:00-9:00AM	Breakfast: Available until 9:00am	Boardroom
8:30-9:45AM	Wake-Up Workshops: Tai Chi, Yoga, Open Swim**	Beeches Lawn
10:00-12:30PM	Mars Block	Turin & Terrace
12:30-1:30PM	Lunch	Boardroom
1:30-2:30PM	Mars Block	Turin & Terrace
2:30-3:30PM	AFTERNOON KEYNOTE: Robert Zubrin The Case for Mars	Turin & Terrace
4:00-5:00PM	Proposal for Mars Development	Turin & Terrace
5:00-6:00PM 5:50-6:00PM	Dinner: Sponsored by AIS Town Hall ais devastating capability, revolutionary advantage	Boardroom
6:10-6:30PM	SPECIAL INTRODUCTION STEAM-TED TALK: Col. Timothy Lawrence, Ph.D. Leadership & Innovation of the Future	Boardroom
6:30-7:30PM	EVENING KEYNOTE: Robert Zubrin Mars Direct– Humans to the Red Planet Within a Decade	Turin & Terrace
8:00-10:00PM	Proposal for Mars Development	Turin & Terrace
9:00-10:00PM	Optional: Stargazing** with MVAS & Keynote Robert Zubrin	Beeches Lawn

*Schedule is Subject to Change
**Weather Permitting

TUESDAY SCHEDULE 7/30

TIME	ACTIVITY	LOCATION
8:00-9:00AM	Breakfast: Available until 9:00am	Boardroom
8:30-9:45AM	Wake-Up Workshops: Tai Chi, Yoga, Open Swim*	Beeches Lawn
10:00-12:30PM	Mars Block	Turin & Terrace
12:30-1:30PM	Lunch	Boardroom
1:30-4:00PM	Mars Block	Turin & Terrace
4:00-5:00PM	Proposal for Mars Development	Turin & Terrace
5:00-6:00PM 6:00-6:15PM	Dinner Town Hall	Boardroom
6:30-7:30PM	EVENING KEYNOTE: Dr. Aprille Ericsson Journey to Mars	Turin & Terrace
8:00-10:00PM	Proposal for Mars Development	Turin & Terrace Computer Lab
8:00-10:00PM	Optional: Movie Room & Ice Cream Social provided by Stewarts	Inn
9:30-11:00PM	Optional: Paranormal Investigation with Rome Investigators of the Paranormal	Meet in the Michelina Room

*Schedule is Subject to Change
**Weather Permitting

WEDNESDAY SCHEDULE* 7/31

TIME	ACTIVITY	LOCATION
8:00-9:00AM	Breakfast: Available until 9:00am	Boardroom
9:00-11:30AM	College & Career Fair– Complete your passport to be eligible to win a prize! Visit page 28 for a list of exhibitors	Turin & Terrace
11:30-12:30PM	Lunch	Boardroom
1:00-4:30PM	Off-Site Tour Block BUS ONE: Rome Tours • Fort Stanwix/Fort Rickey BUS TWO: Utica Tours • MWPAI/MVCC FABLab	Meet at the bus circle by 12:45PM
5:00-6:00PM 6:00-6:15PM	Dinner Town Hall	Boardroom
6:30-8:30PM	Mars Block Proposal for Mars Development Sponsor Thank You Letters	Turin & Terrace
8:30-10:00PM	Proposal for Mars Development	Turin & Terrace Computer Lab
8:30-10:00PM	Optional: Open Swim– Weather Permitting	Pool
8:30-10:00PM	Optional: Movie Room with Refreshments	Inn

*Schedule is Subject to Change

THURSDAY SCHEDULE 8/1

TIME	ACTIVITY	LOCATION
8:00-9:00AM	Breakfast: Available until 9:00am	Boardroom
9:00-10:00AM	STEAM Workshops Block I	Conference Center
10:15-11:15AM	STEAM Workshops Block II	Conference Center
11:30-12:30PM	STEAM Workshops Block III	Conference Center
12:30-1:30PM	Lunch	Boardroom
1:30-2:30PM	SPECIAL PRESENTATION: Max Lugavere Genius Foods in Space– The Essential Foods for Optimal Brain Function	Turin & Terrace
2:30-5:00PM	Proposal for Mars Development	Turin & Terrace
5:00-6:00PM 6:00-6:15PM	Dinner Town Hall	Boardroom
6:30-7:30PM	EVENING KEYNOTE: John Urschel The Beauty of Mathematics	Turin & Terrace
8:00-10:00PM	Proposal for Mars Development	Turin & Terrace Computer Lab
8:00-10:00PM	Optional: Movie Room with Refreshments	Inn
9:30-11:00PM	Optional: Paranormal Investigation with Rome Investigators of the Paranormal	Meet in the Michelina Room

*Schedule is Subject to Change

FRIDAY SCHEDULE* 8/2

TIME	ACTIVITY	LOCATION
8:00-9:00AM	Breakfast: Available until 9:00am	Boardroom
9:00-10:00AM	STEAM Workshops Block I	Conference Center
10:15-11:15AM	STEAM Workshops Block II	Conference Center
11:30-12:30PM	STEAM Workshops Block III	Conference Center
12:30-1:30PM	Lunch	Boardman
1:30-5:00PM	FINAL MARS BLOCK! Proposal for Mars	Turin & Terrace Computer Lab
5:15-5:45PM	Rehearsal	Turin & Terrace
6:00-7:00PM	BBQ Dinner	Tent
7:00-7:45PM	SPECIAL PRESENTATION: Science Bob Pflugfelder The Science of Being a Maker	Tent
8:00-10:00PM	Party on the Green! Open Swim** Music Photo Booth– RK Entertainment Agency Fireworks—Majestic Fireworks	Tent/ Lawn

*Schedule is Subject to Change

**Weather Permitting

SATURDAY SCHEDULE* 8/3

TIME	ACTIVITY	LOCATION
8:00-9:00AM	Breakfast: Available until 9:00am	Boardroom
9:00-9:30AM	Final Proposal Set-Up	Boardroom
9:30-11:30AM	Proposal for Mars STEAM Fair Present your final Proposal for Mars to community members, families, educators, business leaders & experts!	Boardroom
11:45-12:45PM	Closing Ceremonies • A look back at the week • Winners of the Mars STEAM Fair Announced • Award Ceremony • Closing Remarks	Turin & Terrace
1:00-2:30PM	Reflections & BBQ Lunch	Boardroom/ Patio
2:30-3:30PM	STEAM Scholar Departure	Inn

JOIN US NEXT YEAR FOR THE 5TH ANNUAL
PROJECT FIBONACCI® STEAM LEADERSHIP CONFERENCE!

FOLLOW US ON SOCIAL MEDIA FOR UPDATES

*Schedule is Subject to Change

SPECIAL THANK YOU

DIAMOND+ SPONSORS

The Community Foundation of Herkimer & Oneida Counties, Inc.

The Shoreline Group

ANDRO Computational Solutions, LLC

GOLD SPONSOR

Best Buy Foundation

National Grid

BRONZE SPONSORS

Assured Information Security, Inc.

Business Machines Equipment

SCHOOL SUPPORT

Oriskany Central School District

Watkins Glen Central School District

Thomas R. Proctor High School

Young Scholars

Camden Central School District

Herkimer BOCES VP-TECH

Mohawk Valley Community College STEP

Rome Free Academy

Vernon Verona Sherrill Central School District

Albany Medical College STEP

West Canada Valley High School

Westmoreland Central School District

MEDIA SPONSOR

NEWS Channel 2 WKTV Utica

INTERNET SUPPORT

Northland Communications

TECHNICAL SUPPORT

CISCO

Holland Patent Central School District

Herkimer Central School District

Adirondack Central School District

Colonie Central School District

Notre Dame Jr./Sr. High School

SPECIAL THANK YOU

ADOPT-A-SCHOLAR DONORS

AmeriCU

Front of the Class Foundation

Bailey's Karate Schools, Inc.

The Bernhard Family Scholarship

Assured Information Security, Inc.

Dr. Mitchell Wilbert

United Way

Advanced Automation Corporation

Grace Klutschkowski

Donald W. Washburn

Community Bank, N.A.

R-TRONICS

Booz Allen Hamilton

Rome College Foundation

Dan Kostelec & Tara Clifford

Varflex

DONORS & IN-KIND SUPPORT

CISCO Systems

Northland Communications

WKTV

Hazen B. Hinman Foundation

Bailey's Karate Schools

Stewart's Shoppes

The Shirley Griffin Foundation

Gary's Music

Genesis Group

Business Machines Equipment (BME)

The Gallery

Rome Academy of Sciences

Jennifer Sorrell

ALDI

Price Chopper

Nascentia Healthcare

Hill Storage & Rigging, Co. (Middletown, PA)

Rome Academy of Sciences

FUTURE EVENTS—STAY INVOLVED!

PROJECT FIBONACCI® BOOTH AT THE GREAT NYS FAIR

AUGUST 21-SEPTEMBER 2, 2019

The Project Fibonacci® Foundation will be at the Great New York State Fair in Syracuse in the Science and Industry Building from 10 am – 10 pm daily. Come by, learn about the upcoming year's events and activities and show your support for STEAM education! Interested in volunteering to exhibit? Contact us for more information at info@projectfibonacci.org

PROJECT FIBONACCI® INNOVATION CAMPS

FALL 2019-SPRING 2020

The Project Fibonacci® Foundation will be holding a series of one-day events for the fourth year in a row, at both the Beeches Professional Campus and at area schools. Students will learn from experts in the small, unmanned aerial system (s/UAS, or "drone") industry and explore UAS technologies and their role in Central New York and the world beyond. Students will take part in hands-on learning which will include flight safety, aerodynamics, flight simulation, indoor and outdoor manual flight, programming and autonomous flight, photography and videography, and more! Contact Maria Smith at msmith@androcs.com for more information.

2020 PROJECT FIBONACCI® STEAM LEADERSHIP CONFERENCE

SUMMER 2020

Join us for the 5th Annual Project Fibonacci® STEAM Leadership Conference! Hands-on, immersive, interactive, interdisciplinary learning that is team- and project -based, for students entering 10th grade through junior year of college or university. Apply online at ProjectFibonacci.org starting fall 2019

FOLLOW US ON SOCIAL MEDIA FOR UPDATES & MORE INFORMATION:

project FIBONACCI®

FOUNDATION, INC.

IT TAKES A VILLAGE TO RAISE A STEAM COMMUNITY!

THE FOUNDATION

nationalgrid

EPICS IN IEEE

BEST BUY

The Shoreline Group

ais

ANDRO

Northland COMMUNICATIONS

CISCO

BME Office solutions made simple.

NEWS Channel 2 WKTV Utica

THE BABINEC FOUNDATION, INC.

FRONT OF THE CLASS FOUNDATION

THE HAZEN B. HINMAN FOUNDATION

DR. MITCHELL WILBERT

DONALD W. WASHBURN

THE BERNHARD FAMILY SCHOLARSHIP

GRACE KLUTSCHKOWSKI

THE SHIRLEY W. & WILLIAM L. GRIFFIN CHARITABLE FOUNDATION

United Way

ROME COLLEGE FOUNDATION

ORISKANY HIGH SCHOOL

Community Bank N.A.

R-tronics

Bailey's KARATE

HERKIMER · FULTON
HAMILTON · OTSEGO
BOCES
Creating Opportunities for Growth

AmeriCU CREDIT UNION

UTICA CITY SCHOOL DISTRICT
YOUNG SCHOLARS LPP
WHERE WE GROW BIG DREAMS!
UTICA COLLEGE

ROME FREE ACADEMY

The Beeches
Destito Realty, Inc.

ALBANY MEDICAL COLLEGE

MOST
Milton J. Rubenstein Museum of Science & Technology

Watkins Glen Central School District
Making a Difference

aac Advanced Automation Corporation

Varflex

Booz | Allen | Hamilton

THE GENESIS GROUP
OF THE MOHAWK VALLEY REGION
"Your Community Connection"

R.I.P.
ROME INVESTIGATORS OF THE PARANORMAL

Stewart's Shops

ROME AREA CHAMBER OF COMMERCE
OUR BUSINESS IS HELPING YOUR BUSINESS

ALDI

Price Chopper

MVAS