A Different Kind of Women in STEM Meeting

The Maria Mitchell
Women in Science Symposium

Babson Executive Conference Center
October 5-6, 2018
We especially need imagination in science.

Maria Mitchell

Learn more about the Maria Mitchell Association. Visit us online at mariamitchell.org.

Follow us on:
The Nantucket Maria Mitchell Association is proud to host the first Maria Mitchell Women in Science Symposium - an event that we hope will be the first of many.

When the idea for this Symposium first came about five years ago, our aim was to help to celebrate Maria Mitchell’s 200th Birthday while also helping to promote and support women and girls in the STEM fields as Mitchell would have wanted us to. Through this Symposium, we hope to help to continue her legacy which includes the promotion of women and girls in the sciences.

Maria Mitchell (August 1, 1818-June 28, 1889) was America’s first woman astronomer and the first female professor of astronomy in the United States. She believed in hands-on, lifelong learning for all with a focus on the sciences and more specifically, women in the sciences and education. She went on to inspire not just the budding young female scientists of her day, but all women and girls who wished to break the barriers of the spheres in which society tried to encapsulate them. Mitchell served as teacher, mentor, and inspiration for generations of young girls and women and continues to do so today through her legacy and the association founded in her honor in 1902.

As is well known, women continue to be under-represented in the sciences. According to the 2014 Science and Engineering Indicators report by the National Science Foundation, women comprised just 28% of workers in science and engineering occupations in 2010. This under-representation shortchanges the students, the field of science, and the public that benefits from scientific advancement. Maria Mitchell was a firm believer in women’s education and women in science and the Maria Mitchell Association has worked tirelessly to support and encourage women to pursue careers in the sciences for over 100 years.
This Symposium is designed to serve as a source of inspiration and support and to be a hands-on experience in which all attendees are actively participating and problem-solving. To that end, our salon-style gatherings will allow us to meet with one another in small groups where we can develop plans and tools for real-world solutions that we can bring back to our organizations, schools, and businesses. We hope that this Symposium will be a biennial event and that we will be able to keep the dialogue going not just at the Symposium, but via other platforms so that we can assist and encourage one another and continue the dialogue and our work. As Maria Mitchell once said to her students, “We are women studying together.”

Finally, with this first Symposium, we are re-introducing the Maria Mitchell Women in Science Award, which in the past was awarded to an individual, program, organization, or group that encourages girls and women to pursue studies and careers in the natural and physical sciences, mathematics, engineering, computer science, and technology. While there are many awards for scholastic and professional achievement in the sciences, this award recognizes those who help women and girls succeed in scientific endeavors. Stay tuned, for this too will be a biennial event to occur at the Symposium and we hope to put together a group of jurors and a committee for the application process. If you are interested in assisting with the Award or future Symposiaums, please let us know by stopping by the registration desk and signing up.

Thank you for joining us - we are so very glad to have you with us for this important gathering.

David Gagnon  Jascin N. Leonardo Finger
MMA Executive Director  MMA Deputy Director
Curator of the Mitchell House, Archives & Special Collections

Please make sure to pick-up an evaluation form and return it to us before you leave.
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In 2001, Sobel received the Individual Public Service Award from the National Science Board, "for fostering awareness of science and technology among broad segments of the general public." Also in 2001, the Boston Museum of Science gave her its prestigious Bradford Washburn Award for her, "outstanding contribution toward public understanding of science, appreciation of its fascination, and the vital role it plays in all our lives." In October 2004, in London, Ms. Sobel accepted the Harrison Medal from the Worshipful Company of Clockmakers, in recognition of her contribution to increasing awareness of the science of horology by the general public, through her writing and lecturing. And in 2008, the Astronomical Society of the Pacific awarded her its Klumpke-Roberts Award for, "increasing the public understanding and appreciation of astronomy."

She has served as the Robert Vare Non-Fiction Writer in Residence at the University of Chicago, as the Elizabeth Kirkpatrick Doenges Visiting Artist/Scholar at Mary Baldwin College in Staunton, Virginia, and held a two-year appointment as the Joan Leiman Jacobson Visiting Nonfiction Writer at Smith College in Northampton, Massachusetts starting in 2013.

Her book *Longitude* went through twenty-nine hardcover printings before being reissued in October 2005 in a special tenth-anniversary edition with a foreword by astronaut Neil Armstrong. The book was translated into two dozen foreign languages and became a national and international bestseller.
It won several literary prizes, including the Harold D. Vursell Memorial Award from the American Academy of Arts and Letters and "Book of the Year" in England. Together with William J. H. Andrews, who introduced her to the subject of longitude, Ms. Sobel co-authored The Illustrated Longitude. Galileo's Daughter won the 1999 Los Angeles Times Book Prize for science and technology, a 2000 Christopher Award, and was a finalist for the 2000 Pulitzer Prize in biography.

Sobel has spoken at The Smithsonian Institution, The Explorers' Club, NASA's Goddard Space Flight Center, The Folger Shakespeare Library, The New York Public Library, The Hayden Planetarium, The Royal Geographical Society (London), and the American Academy in Rome. She has been a frequent guest on National Public Radio programs, including "All Things Considered," "Fresh Air," and "The Diane Rheem Show." Her television appearances include C-SPAN's "Booknotes" and "TODAY" on NBC.

A 1964 graduate of the Bronx High School of Science, Sobel attended Antioch College and the City College of New York before receiving her bachelor of arts degree from the State University of New York at Binghamton in 1969. She holds honorary doctor of letters degrees from the University of Bath, in England, and Middlebury College, Vermont.

For women, there are undoubtedly great difficulties in the path, but so much the more to overcome. First, no woman should say, 'I am but a woman.' But a woman! What more can you ask to be. Born a woman, born with the average brain of humanity, born with more than the average heart, if you are mortal what higher destiny could you have. No matter where you are nor what you are, you are a power. Your influence is incalculable, personal influence is always underrated by the person. We are all centres of spheres—we see the portions of the sphere above us, and we see how little we affect it. We forget the part of the sphere around and before us—it extends just as far every way.

– Maria Mitchell
Jill Tarter is the Chair Emeritus for SETI Research. She held the Bernard M. Oliver Chair for SETI (Search for Extraterrestrial Intelligence) and is the former Director of the Center for SETI Research at the SETI Institute in Mountain View, California. She served as Project Scientist for NASA’s SETI program, the High Resolution Microwave Survey, and has conducted numerous observational programs at radio observatories worldwide. With the termination of funding for NASA’s SETI program in 1993, she served in a leadership role to secure private funding to continue the exploratory science.

Currently, she serves on the management board for the Allen Telescope Array, a joint project between the SETI Institute and the UC Berkeley Radio Astronomy Laboratory. When this innovative array of 350 6-m antennas begins operations at the UC’s Hat Creek Radio Observatory, it will simultaneously survey the radio universe for known and unexpected sources of astrophysical emissions, and speed up the search for radio emissions from other distant technologies by orders of magnitude.

Tarter’s work has brought her wide recognition in the scientific community, including the Lifetime Achievement Award from Women in Aerospace, two Public Service Medals from NASA, Chabot Observatory’s Person of the Year award (1997), Women of Achievement Award in the Science and Technology category by the Women’s Fund and the San Jose Mercury News (1998), and the Tesla Award of Technology at the Telluride Tech Festival (2001). She was elected an AAAS Fellow in 2002 and a California Academy of Sciences Fellow in 2003 (and CAS Scientific Trustee in 2007). In 2004, Time Magazine named her one of the “Time 100 Most Influential People in the World,” and in 2005 Tarter was awarded the Carl Sagan Prize for Science Popularization at “Wonderfest,” the biannual San Francisco Bay Area Festival of Science.

In 2006, Tarter became a National Advisory Board member for the Center for Inquiry’s Office of Public Policy in Washington, DC. She is also a Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP) Fellow.
Tarter is deeply involved in the education of future citizens and scientists. In addition to her scientific leadership at NASA and the SETI Institute, Tarter has been the Principal Investigator for two curriculum development projects funded by NSF, NASA, and others. The first, the “Life in the Universe” series, created six science teaching guides for grades 3-9 (published 1994-96). Her second project, “Voyages Through Time,” is an integrated high school science curriculum on the fundamental theme of evolution in six modules: Cosmic Evolution, Planetary Evolution, Origin of Life, Evolution of Life, Hominid Evolution, and Evolution of Technology (published 2003).

Tarter is a frequent speaker for science teacher meetings and at museums and science centers, bringing her commitment to science and education to both teachers and the public. Many people are now familiar with her work as portrayed by Carl Sagan in his book Contact and the subsequent movie starring Jodie Foster.

Tarter received her Bachelor of Engineering Physics Degree with Distinction from Cornell University and her Master’s Degree and a Ph.D. in Astronomy from the University of California, Berkeley.

We especially need imagination in science. It is not all mathematics, nor all logic, but it is somewhat beauty and poetry. There will come with the greater love of science greater love to one another. Living more nearly to Nature is living farther from the world and its follies, but nearer to the world’s people; it is to be of them, and for them, and especially for their improvement. We cannot see how impartially Nature gives of her riches to all, without loving all, and helping all; and if we cannot learn through Nature’s laws the certainty of spiritual truths, we can at least learn to promote spiritual growth while we are together, and live in a trusting hope of a greater growth in the future. The great gain would be freedom of thought.

– Maria Mitchell
Meg Urry, Ph.D.

Meg Urry is the Israel Munson Professor of Physics and Astronomy and Director of the Yale Center for Astronomy and Astrophysics. She served as Chair of the Physics Department at Yale from 2007 to 2013 and as the President of the American Astronomical Society from 2013-2017.

Her scientific research focuses on active galaxies, which host accreting supermassive black holes in their centers. She has published over 300 refereed research articles on supermassive black holes and galaxies and was identified as a “Highly Cited Author” by Thomson Reuters.

Professor Urry is a Fellow of the American Academy of Arts and Sciences, the National Academy of Sciences, the American Association for the Advancement of Science, the American Physical Society, and American Women in Science. She received an honorary doctorate from Tufts University and was awarded the American Astronomical Society’s Annie Jump Cannon and George van Biesbroeck prizes. Prior to moving to Yale in 2001, Prof. Urry was a senior astronomer at the Space Telescope Science Institute, which runs the Hubble Space Telescope for NASA. Professor Urry is also known for her efforts to increase the number of women and minorities in science, for which she won the 2015 Edward A. Bouchet Leadership Award from Yale University and the 2010 Women in Space Science Award from the Adler Planetarium. She also writes about science for CNN.com.

Professor Urry received her Ph.D. from the Johns Hopkins University and her B.S. in Physics and Mathematics summa cum laude from Tufts University.

All that women ask for is the enlightenment of our present leaders.

– Maria Mitchell
After a postdoctoral fellowship at the Harvard College Observatory, Kate Kirby was appointed as research physicist at the Smithsonian Astrophysical Observatory and lecturer in the Harvard University Department of Astronomy. From 1988 to 2001, she served as an associate director at the Harvard-Smithsonian Center for Astrophysics, heading the Atomic and Molecular Physics Division.

From 2001-2007, she served as director of the Institute for Theoretical Atomic, Molecular and Optical Physics (ITAMP) at Harvard and Smithsonian. In July, 2009 she was appointed executive officer of the American Physical Society. Dr. Kirby's research interests lie in theoretical atomic and molecular physics, particularly the calculation of atomic and molecular processes important in astrophysics and atmospheric physics. She is a fellow of both APS and the American Association for the Advancement of Science.

Kate Kirby earned her bachelor’s degree in chemistry and physics from Harvard/Radcliffe College and her Ph.D. from the University of Chicago.

*I cannot conceive that the soul of Maria Mitchell can ever die.*

- John Greenleaf Whittier
Cecilia Aragon, Ph.D

Cecilia Aragon is a Professor in the Department of Human Centered Design & Engineering and a Senior Data Science Fellow at the eScience Institute at the University of Washington. Previously, she was a data scientist in the Computational Research Division at Lawrence Berkeley National Laboratory for six years, after earning her Ph.D. in Computer Science from UC Berkeley. She earned her B.S. in mathematics from the California Institute of Technology. Her research focuses on human-centered data science, an emerging field at the intersection of human-computer interaction (HCI), computer-supported cooperative work (CSCW), and the statistical and computational techniques of data science. She has authored or co-authored over 100 peer-reviewed publications and over 130 other publications in the areas of HCI, CSCW, data science, visual analytics, machine learning, and astrophysics.

Aragon is the co-inventor (with Raimund Seidel) of a data structure, the treap, which has been commended for its elegance and efficiency, and is now widely used in production applications ranging from wireless networking to memory allocation to fast parallel aggregate set operations. In 2008, she received the Presidential Early Career Award for Scientists and Engineers (PECASE), the highest honor bestowed by the US government on outstanding scientists in the early stages of their careers, for her work in collaborative data-intensive science.

Aragon's research has been recognized with over $27M in grants from federal agencies, private foundations, and industry, and has garnered six Best Paper awards since 2004. She was awarded a 2017-18 Fulbright Fellowship to conduct research in human-centered data science and teach visual analytics in Chile. She received the HCDE Faculty Innovator in Research Award from the University of Washington and has won the Distinguished Alumni Award in Computer Science from UC Berkeley. She was named one of the Top 25 Women of 2009 by Hispanic Business Magazine. She is a founding member of Latinas in Computing, was a board member of the Computing Research Association’s Committee on the Status of Women in Computing Research (CRA-W), a founding member of Berkeley Lab’s Computing Sciences Diversity Working Group and Women in Science Council, chair of the IEEE Computer Society’s Entrepreneur and Pioneer Awards committee, and has served as a reviewer and program committee member for numerous computer science conferences.
Heather Goldstone, Ph.D.

Heather Goldstone is the science editor at WCAI, the Cape and Islands NPR Station. She holds a Ph.D. in ocean science from M.I.T. and the Woods Hole Oceanographic Institution, and spent a decade as an active researcher before leaving the lab to become a writer. In her nine years with the Cape and Islands NPR Station, Goldstone has reported on Woods Hole’s unique scientific community and key environmental issues on Cape Cod. Her reporting has appeared in venues ranging from NPR and PBS News Hour to The Cape Cod Times and Commercial Fishery News. Most recently, Goldstone hosted the blog “Climatide,” an exploration of how climate change is impacting coastal life in the region.

Christine Kelley, Ph.D.

Christine Kelley is an Associate Professor in the Department of Mathematics at the University of Nebraska-Lincoln. She received her Ph.D. in mathematics from the University of Notre Dame in 2006. She was a Postdoctoral Fellow at the Fields Institute in Toronto, and in the Department of Mathematics at The Ohio State University. Dr. Kelley’s research is in coding theory, applied discrete mathematics, and applied algebra. Another research interest is in applying algebraic and combinatorial methods to coding applications such as flash memory storage, data streaming, and communication networks. Her research has been supported by an NSA Young Investigator grant (Spring 2011-Fall 2013) and by an NSF EPSCoR First Award (2009-2010). In Spring 2010, Dr. Kelley received the University of Nebraska’s Harold and Esther Edgerton Junior Faculty Award for “creative research, extraordinary teaching abilities, and academic promise,” and she was the Harold and Esther Edgerton Assistant Professor from 2010-2012. Dr. Kelley is currently a co-chair for the Nebraska Conference for Undergraduate Women in Math.
Ann LaCasce, M.D.

Ann LaCasce MD, MMSc, Associate Professor of Medicine, is a lymphoma specialist and is the Director of the Dana-Farber/Partners CancerCare Fellowship in Hematology/Oncology. She serves on the Alliance Lymphoma Committee, the National Cancer Comprehensive Lymphoma Guidelines Panel, and the Lymphoma Research Foundation's Scientific Advisory Committee. She earned her medical degree from Tufts University School of Medicine.

Russette Lyons, Ph.D.

Russette obtained both her Masters and Ph.D. degrees from the University of Nebraska in Lincoln where she studied classical genetics, protein biochemistry, and cellular growth control mechanisms. After completing her post-doctoral training at Vanderbilt School of Medicine, she began working as a research scientist at one of the first gene therapy companies in the world, Genetic Therapy, Inc., which was acquired by Novartis in 1995. During her tenure at Genetic Therapy, Inc., Lyons took on several roles, including Head of Preclinical Safety, Head of Research & Development, and Chief Operating Officer. After the closing of Genetic Therapy, Inc., Lyons continued her professional career at Novartis as a project manager and Head of Development Project Management for the Novartis Vaccines Division.

More recently, Lyons has had the opportunity to develop interactive science education programs, first as the Head of the Office of Education at the Novartis Institutes for BioMedical Research and currently as the Director of the Novartis Community Exploration & Learning Lab (CELL), which is dedicated to inspiring local middle and high school students in biomedical science.
Jaqueline MacDonald Gibson, Ph.D.

Jackie MacDonald Gibson is an Associate Professor at the Department of Environmental Sciences and Engineering UNC with a multi-disciplinary background in mathematics, engineering, and science that she has applied to study risk assessment policy and communication for more than twenty-five years. Much of her work centers on predicting population health impacts of alternative environmental policy decisions. She was formerly the assistant director of the Water Science and Technology Board of the National Research Council in Washington, DC. She holds a BA in Mathematics from Bryn Mawr College, a MS from the University of Illinois, and two Ph.D.s from Carnegie Mellon University.

Shirley Malcom, Ph.D.

Shirley Malcom is head of Education and Human Resources Programs at the American Association for the Advancement of Science. She works to improve the quality and increase access to education and careers in STEM fields, as well as to enhance public science literacy. Dr. Malcom is a trustee of Caltech, a regent of Morgan State University, and a member of the SUNY Research Council. She is a former member of the National Science Board, the policymaking body of the National Science Foundation, and served on President Clinton’s Committee of Advisors on Science and Technology. Malcom, a native of Birmingham, Alabama, received her Ph.D. in ecology from The Pennsylvania State University, a master’s in zoology from UCLA, and bachelor’s with distinction in zoology from the University of Washington. She holds sixteen honorary degrees.

Malcom serves on the boards of the Heinz Endowments, Public Agenda, the National Math-Science Initiative, and Digital Promise. Internationally, she is a leader in efforts to improve access of girls and women to education and careers in science and engineering and to increase use of S&T to empower women and address problems they face in their daily lives, serving as co-chair continued
Colette Salyk, Ph.D.

Colette Salyk is the Assistant Professor of Astronomy at Vassar College. She earned her Ph.D. in Planetary Sciences at the California Institute of Technology in 2009; her master’s in Planetary Sciences at the California Institute of Technology in 2005; and her BS in Planetary Science at Massachusetts Institute of Technology in 2003. Teaching interests include planetary science, observational astronomy, and introductory physics. Dr. Salyk studies the formation of planets using both ground- and space-based telescopes. In particular, she studies the relationship between protoplanetary disk properties (including chemical composition) and planetary diversity. Her honors and awards include: NOAO Excellence Award, Leo Goldberg Fellowship recipient, Harlan J. Smith Fellowship recipient, and Philanthropic Education Organization Scholar Award recipient. Salyk is a founder of the Steward Observatory/NOAO Women’s Science Forum mentorship program. She is a member of the American Astronomical Society.

Meghan Spencer

Meghan is a dedicated newly licensed teacher in General Science. She has experience teaching science in an urban middle school setting at Prospect Hill Academy in Cambridge, MA. She also has a background in developing and teaching experiential hands-on and minds-on learning experiences for urban middle and high school students at the Novartis Community Exploration & Learning Lab (CELL) in Cambridge. continued
Margaret Spencer, continued

Meghan has worked at Novartis for eight years. Highlights of her time at Novartis include collaborating on the development of the CELL Lab and managing the Novartis Weekly Seminar Series that invites external scientists to speak and provides educational and networking opportunities for employees. Meghan is a Co-Chair of the Cambridge Women’s Resource Group Speaker Series and invites speakers that are relevant to Novartis and women working in the field of science. Meghan pursued her Master's Degree at Cambridge College while working full time at Novartis.

Susana Widicus Weaver, Ph.D.

Susana Widicus Weaver is an Associate Professor and Director of the Graduate Studies Department of Chemistry at Emory University. She holds a Ph.D. from the California Institute of Technology and a BSc, from Illinois Wesleyan University. She was a Postdoctoral Scholar in the Departments of Chemistry and Astronomy at the University of Illinois at Urbana-Champaign. Her areas of research include: Astrochemistry and Molecular Spectroscopy. Widicus Weaver was named to the Editorial Board of the Journal of Physical Chemistry for 2017 to 2019. The journal celebrated its centennial in 1996 and encompasses the field of physical chemistry in four related journals.

This Maria Mitchell Association is a Memorial. Work carried on in memory of a worker is more enduring than marble and bronze.

– From the Maria Mitchell Observatory dedication pamphlet, 1908
The Maria Mitchell Women in Science Symposium Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:00 - 2:00 PM</td>
<td>Registration, coffee</td>
</tr>
<tr>
<td>2:00 - 3:30 PM</td>
<td>Welcome and Keynote Speaker Dava Sobel</td>
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<tr>
<td></td>
<td>&quot;The Glass Universe and Maria Mitchell at 200: A Woman’s Place in Astronomy - A Historical Perspective on Women in STEM&quot;</td>
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<tr>
<td>3:30 - 4:15 PM</td>
<td>Talk on Current Statistics with Meg Urry</td>
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<td></td>
<td>&quot;By The Numbers: The Current Statistics on Women and Girls in STEM&quot;</td>
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<tr>
<td>4:15 - 4:30 PM</td>
<td>Coffee</td>
</tr>
<tr>
<td>4:30 - 6:00 PM</td>
<td>Panel</td>
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<tr>
<td></td>
<td>&quot;Recruitment: How to Bring Women and Girls into STEM&quot;</td>
</tr>
<tr>
<td>6:15 - 7:30 PM</td>
<td>Reception with poster session</td>
</tr>
<tr>
<td>7:45 - 9:00 PM</td>
<td>Salon-style discussion groups</td>
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*Evening observing at Wellesley College Observatory, weather permitting. Please sign up at the MMWISS registration desk. Transportation will be provided. Space is limited.*
### Schedule

**Saturday, October 6, 2018**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 - 9:00 AM</td>
<td>Coffee and Posters</td>
</tr>
<tr>
<td>9:00 - 10:30 AM</td>
<td>Panel</td>
</tr>
<tr>
<td></td>
<td>“Retention: Strategies for Stemming the Leaky Pipeline and Ending Unconscious Bias”</td>
</tr>
<tr>
<td>10:45 - 11:30 AM</td>
<td>Salon</td>
</tr>
<tr>
<td>12:00 - 12:45 PM</td>
<td>Lunch in Sorenson (Babson)</td>
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<tr>
<td>1:00 - 1:30 PM</td>
<td>Kate Kirby</td>
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<td>“What Does the Future Look Like for Women and Girls in STEM”</td>
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<tr>
<td>1:30 - 2:45 PM</td>
<td>Panel</td>
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<tr>
<td></td>
<td>“The Future: Where Are We Going and How Do We Get There? The Future of Women and Girls in STEM”</td>
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<tr>
<td>2:45 - 3:30 PM</td>
<td>Salon</td>
</tr>
<tr>
<td>3:30 - 4:15 PM</td>
<td>Coffee and poster session</td>
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<tr>
<td>4:15 - 5:00 PM</td>
<td>Moderated Salon Report</td>
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<tr>
<td></td>
<td>Report back to entire group the key results of small group discussions</td>
</tr>
<tr>
<td>5:00 - 5:30 PM</td>
<td>Closing Remarks - Jill Tarter</td>
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<tr>
<td></td>
<td>“We Are Women Studying Together: A Synthesis on the Maria Mitchell in Science Symposium’s First Meeting”</td>
</tr>
<tr>
<td>5:30 - 5:45 PM</td>
<td>Maria Mitchell Women in Science Award Presentation</td>
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What is a Salon?
The French salon, a product of the Enlightenment in the early eighteenth century, was a key institution in which women played a central role. Salons provided a place for women and men to congregate for intellectual discourse. In a male-dominated society, women served as the hostesses, decided the agenda of topics to be discussed, and regulated the conversation. This led to reduced marginalization of women in Paris. The emergence of salons allowed for leadership and involvement for women in intellectual areas in Paris in the early eighteenth century.


With a large group as we find ourselves during this Symposium, we want to give everyone the ability to voice their thoughts, opinions, and ideas. Since we remain as one large group for most of the time, these salons will offer all of us a more intimate setting in which everyone will feel able to speak. From these salons, we hope to begin to brainstorm and to create real-world solutions that we can take back to our places of work. In the spirit of Maria Mitchell, “We are women (and men) studying together.”
Our Symposium Home

Babson Executive Conference Center
Babson College
231 Forest Street • Babson Park, MA 02457
781 239-4000

Sorenson Commons
The place where you can find breakfast, lunch, and dinner.
*Please inquire about reservations at the Front Desk.*

Restaurants Near Babson Executive Conference Center and Babson College

**Café Mangal**
Mediterranean & American, influenced by Turkish cuisine
555 Washington St. • Wellesley
781-235-5322 • cafemangal.com

- Lunch Hours
  - Mon-Fri: 10:30am-3pm
  - Sat: 11am-3pm

- Dinner Hours
  - Wed-Thu: 6pm - 9pm
  - Fri-Sat: 6pm - 9:30pm

**The Linden Store**
Sandwiches, soups, salads
162 Linden St. • Wellesley
781-235-9837 • Lindenstore.com
Mon - Fri: 6:30am-4:30pm
Sat: 6:30am- 3pm
Closed Sunday

**Juniper**
13 Central St. • Wellesley
781-446-6950 • juniperwellesley.com
NEARBY RESTAURANTS

Volante Farms
Farmstand, Deli
292 Forest St • Needham
781-444-2351 • volantefarms.com

Farmstand & Greenhouse
Mon – Fri: 8am - 7pm
Sat – Sun: 8am to 6pm

Wine & Beer
Mon – Fri: 9am - 7pm
Sat: 9am - 6pm
Sun: 12pm - 6pm

The Farmhouse
American, vegetarian and vegan friendly
970 Great Plain Ave. • Needham
781-449-6200
thefarmhouseneedham.com

Bocado
Tapas
45 Church St • Wellesley
781-772-2390
bocadotapasbar.com
Sun–Wed 11:30am–9pm.
Thu–Sat 11:30am–10pm

The Local
11 Forest St • Wellesley
liveeatlocal.com/wellesley
781-694-1210

Whole Foods Market
442 Washington St • Wellesley
781-235-7262

Wellesley Bakery and Cafe
542 Washington St • Wellesley
781-235-1171

Peet’s Coffee & Tea
9 Central St • Wellesley
781-235-001
Who Was Maria Mitchell?

The woman who does her work better than ever woman did before helps all woman kind, not only now, but in all the future, she moves the whole race no matter if it is only a differential movement, it is growth. – Maria Mitchell

In a small house on Nantucket Island, America’s first woman astronomer was born and raised in a Quaker family of ten children. Surrounded by books, supported in learning, encouraged to inquire, to ramble and investigate the natural world around them. Science ran rampant through the household with an astronomer and teacher father, a librarian mother. A happy house, filled with color where it could be found – as such a thing was frowned upon by the Friends (Quakers). All the children learned to assist their father in his astronomical work, but Maria seemed to take to it much more – her first love being mathematics.

Outside the doors of their home, Maria had the unique opportunity to be raised on a heavily Quaker-influenced island where she saw women at work in a time where women were most often relegated to the sphere of domesticity. The first twenty-eight years of life, spent on tiny, isolated and independent Nantucket and raised in a Quaker family that highly valued education and inquiry, would shape Maria for a future of hard work and major scientific and social accomplishment. Her life off the island would be one of further...
ABOUT MARIA MITCHELL

exploration, life on the world-stage, and a long tenure of educating the future women scientists and educators of the world.

While her discovery of a telescopic comet on October 1, 1847, would launch her onto the world-stage and bring her a gold medal from the King of Denmark – the first American and first woman to receive the honor – Maria was a woman who was among the first in many things. One of the first women to work for the US federal government, the second woman to be inducted into the American Philosophical Society, the first woman inducted into the American Academy of Arts and Sciences, and one of the first to be inducted into the American Association for the Advancement of Science. She was the first professor – female or male – who was hired by Vassar College (founded 1863, opened 1865) making her the first woman professor of astronomy in the United States. And, she was a founder of the Association for the Advancement of Woman – including its president for a term and the founder of its Science Committee which she chaired for the remainder of her life. She was also a founder of SOROSIS – a national women’s organization.

Standing under the canopy of the stars, you can scarcely do a petty deed or think a wicked thought. - Maria Mitchell

Maria Mitchell’s influence reached far and wide and remained strong through many generations of not just her own students but the students of her students. Her immediate galaxy was of course the women who took her astronomy and mathematics classes at Vassar. She instilled in her students a lifelong love of learning and learning-by-doing and the knowledge that as women, they had the power, strength, and knowledge to be the future of women scientists and educators of the world. Some would go on to great
accomplishments and some would go on to quietly influence other young learners of the world - spreading Maria’s legacy farther afield. Her students became: the first woman to earn a Ph.D. in mathematics from Yale University, one of the first women to be admitted to MIT, a “computer” at the Harvard College Observatory, the founder of the home economics movement, astronomy professors, one of the first women admitted to the Royal Academy of Art in The Hague, teachers, doctors, influencers of girls and women for generations beyond Mitchell’s life.

Our want of opportunity was our opportunity - our privations were our privileges, our needs were our stimulants – we are what we are partly because we had little and wanted much, and it is hard to tell which was the more powerful factor.

– Maria Mitchell
About Your Host
The Nantucket Maria Mitchell Association

For the rest of their lives these three Nantucket-born sisters [Mary, Eliza, and Lydia Mitchell – Maria Mitchell’s paternal cousins] worked to make what they called The Nantucket Maria Mitchell Association not only a memorial to a distinguished Nantucket woman, but to create a popular scientific center for people . . . . to develop an institution where scientific research worthy of America’s first woman astronomer might go forward.

From Thomas E. Drake’s A Scientific Outpost: The First Half Century of The Nantucket Maria Mitchell Association

Maria Mitchell’s family – her siblings, nieces, nephews, and cousins – and her former Vassar College students, colleagues, and friends created a living memorial to America’s first woman astronomer and one that continues to thrive today more than one hundred years after its founding. This memorial reaches, inspires, and educates through its programs, museums, research center, and observatories, including the historic Mitchell House – birthplace of Maria Mitchell in 1818 – where the Association began.

In 1902, family, students, and friends of Maria Mitchell came together to form the Nantucket Maria Mitchell Association (MMA). Their intention for founding such an Association was to carry on the legacy of Maria Mitchell. Mitchell’s love of the natural world; her constant quest to learn and understand; her love of the sciences,
Maria Mitchell was not just an astronomer but a life-long learner and a naturalist. To that end, soon after the founding of the organization, the MMA discovered that it was already outgrowing the birthplace house and over a few decades would grow to encompass an observatory (1908), a science library (1919) which is now the MMA’s research center and biological collections storage after a recent renovation, a natural science museum (1945), another observatory for public open nights and research (1968 with a second dome in 2006), and an aquarium (numerous sites until its final resting place in 1986).

Today, the MMA offers interactive, hands-on educational programs for all ages. It welcomes over 14,000 people through its doors and out into the unique ecosystems of Nantucket via walks, classes, workshops, children’s Summer Discovery Programs, open nights at the observatory, museum sites, and lectures. The MMA works with the public and private schools from both on and off the island, colleges and universities, and conducts citizen science programs. Its summer college intern program is well-known and respected, as is its volunteer and intern program for high school students. Research is conducted in the areas of astronomy, history, and natural science which is presented at conferences, such as the American Astronomical Society at its winter meetings, and is published in various peer-reviewed journals and other periodicals. The MMA continues to preserve the birthplace of Maria Mitchell, her papers and those of her family, her library, and astronomical equipment. Biological collections date back to the late nineteenth century and include insects, plants, mammals, reptiles, fish, and birds. Glass plates of the night sky – taken at the MMA observatory starting in the 1920s – are also preserved by the MMA.

Maria Mitchell’s ideal of learning-by-doing lives on in the MMA in every aspect of this over one century old not-for-profit organization. By hands-on-learning, individuals build a better connection and appreciation for what they learn and are better able to share and express what they learn with others. A spark is created that is passed on – much in the manner of Maria Mitchell herself.
The Mission of the Nantucket Maria Mitchell Association is promotion of the legacy of Maria Mitchell and exploration, education and enjoyment of Nantucket’s land, waters and skies beyond. In fulfilling our mission, we recognize the historic persona of Maria Mitchell, the foremost American woman scientist and educator of the nineteenth century, and her potential impact on contemporary thought by passing on her legacy of intellectual curiosity, respect for and love of nature, learning by doing, and the ideal of individualism.

Maria Mitchell’s contributions to astronomy, science, and education are the basis for our continuing tradition of high quality research and teaching which inspires today’s learners and tomorrow’s scientists. The NMMA provides scientific resources and educational programs for the community, uses Nantucket Island as an exceptional natural laboratory in which to study science and the environment, and maintains research and/or representative collections of Nantucket’s biodiversity.

We strive to delight our members, supporters, and visitors by providing high quality programs, services, and facilities.

We strive to ensure our financial viability and the preservation of our buildings and important collections so that current and future generations can share in this legacy. We strive to collaborate with other institutions (both on- and off-island) to share relevant organizational assets to accomplish these objectives, obtain cost efficiencies, and reduce our impact on the environment.
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