

# Webcasts:

[physics.yale.edu/4th-international-conference-women-physics](http://physics.yale.edu/4th-international-conference-women-physics)

Department of Physics home | 4th International Conference on Women in Physics

## 4th International Conference on Women in Physics



**ICWIP4 was held in Stellenbosch, Western Cape, South Africa on April 5-8, 2011. We will be posting videos of the plenary talks, interviews, workshops as they are available.**

***Please click on the dates below to view the videos!***

### **Tuesday, April 5, 2011**

- *Welcome and Opening Remarks by Prof. Patricia Whitelock*
- *Welcoming Address by the Executive Mayor of Stellenbosch, Alderman Cyril Jooste*
- *Speech by IUPAP Working Group, Prof. Silvina Ponce-Dawson (Argentina)*
- *Speech by ICSU-ROA, Dr. Edit Madela-Mntla*



Search

[Login](#) | [Become a Member](#) | [Contact Us](#)

Publications

Meetings & Events

Programs

Membership

Policy & Advocacy

Careers in Physics

AI  
S

Programs

Education

International Affairs

Physics Outreach

W

■ Women in Physics & Meetings

■ Scholarships & Awards

■ Publications & Multimedia

■ Women Speakers List

■ Site Visits

■ Assessing Graduate Programs

■ Resources

Minorities in Physics

Prizes, Awards & Fellows

[Home](#) | [Programs](#) | [Women in Physics](#) | [Scholarships](#)

[Fellowship and Conference Fund](#)

[Summer Research Fellowship and Conference Fund](#)

## About Michele

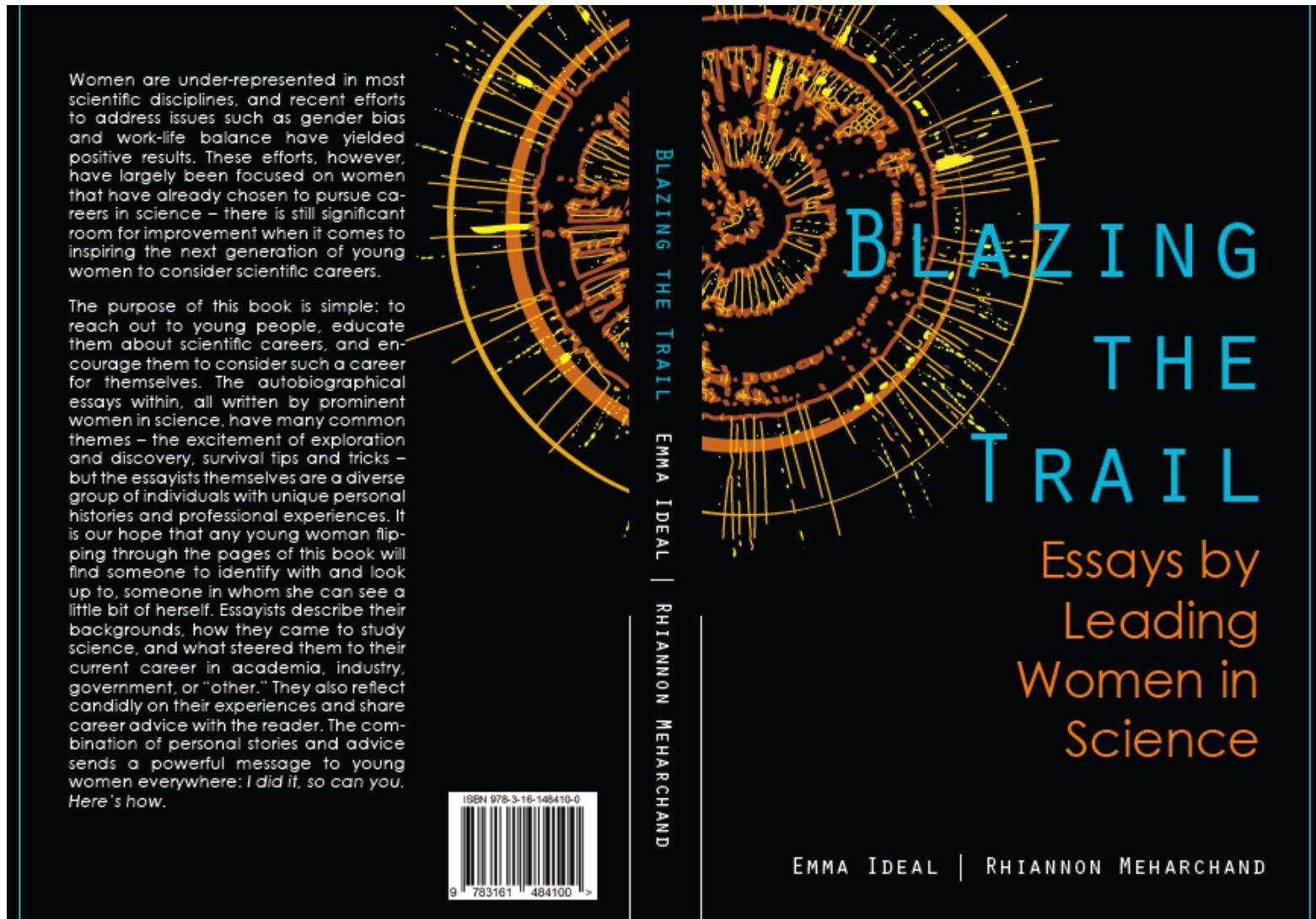
Michele Dufault, Yale College class of 2011 (Saybrook), died in a tragic accident on April 12, 2011. Michele was a Physics & Astronomy major, a strong supporter of other women in science, and a leader among leaders. As a freshman, Michele developed a passion for astronomy and physics after taking a survey course on exoplanets, black holes, and dark energy. Her first summer research project, at Yale, involved identifying galaxies in a deep survey of the cosmos. The following summer she worked at the Institute for Astronomy in Hawaii, studying infrared emission from massive, merging galaxies. Her third and last summer, she spent at the Woods Hole Oceanographic Institution, working on robotic underwater vehicles. Michele was planning to continue work in ocean sciences at the University of Washington following her graduation from Yale. She died in a machine shop while finalizing her senior thesis project, an effort to develop a detector for low-mass dark matter particles.

Michele was passionate about science. Her infectious enthusiasm, curiosity,



Book: [hep.yale.edu/wipbook](http://hep.yale.edu/wipbook)

# Blazing the Trail: Essays by Leading Women in Science



# Creators, editors: “Blazing the Trail”

**Emma Ideal**



**Rhiannon Meharchand**



# Essay Contributors

1. Christine A. Aidala (Los Alamos NL/U Michigan)
2. Susan Davis Allen (Arkansas State University)
3. Ani Aprahamian (Notre Dame)
4. Sheila Brown Bailey (NASA Glenn)
5. Olgica Bakajin (Lawrence Livermore National Lab)
6. Daniela Bortoletto (Purdue University)
7. Patricia R. Burchat (Stanford University)
8. Cathryn Carson (University of California, Berkeley)
9. Shirley Chiang (University of California, Davis)
10. Janet Conrad (MIT)
11. Esther Conwell (University of Rochester)
12. Jill P. Dahlburg (Naval Research Lab)
13. Arati Dasgupta (Naval Research Lab)
14. Sarah M. Demers (Yale University)
15. Mildred Dresselhaus (MIT)
16. Lucy Fortson (University of Minnesota)
17. Elsa Garmire (Dartmouth)
18. Jarita C. Holbrook (UCLA)
19. Carolina C. Ilie (State Univ. New York Oswego)
20. Barbara A. Jones (IBM Almaden)
21. Noemie Benczer Koller (Rutgers University)
22. Lillian Christie McDermott (U Washington)
23. Anne-Marie Novo-Gradac (NASA HQ)
24. Linda J. Olafsen (Baylor University)
25. Angela Olinto (University of Chicago)
26. Marjorie A. Olmstead (U Washington)
27. Michelle L. Povinelli (U Southern California)
28. Diane (Betsy) Pugel (NASA Goddard)
29. Juana Rudati (Xradia, Inc.)
30. Michelle D. Shinn (Jefferson Lab)
31. Elizabeth H. Simmons (Michigan State U)
32. Elma Beth Snipes (TEC-USA)
33. Meg Urry (Yale University)
34. Lakeisha Maria Hogue Walker (Oak Ridge NL)
35. Alice E. White (Bell Labs)

# Book Structure

- Cover (thanks to Art undergrad Jane Long for her help!)
- Dedication
- Table of Contents
- Preface
- Acknowledgements
- Essays (headshot photo, Bona Fides, narrative)
- About the Editors

~ 276 pages (5.25" x 8", black and white interior, color cover)

# Publishing

- Amazon CreateSpace self-publishing
  - <https://www.createspace.com/Products/Book/>
- Gives us full control over the manuscript and means less time to get the book out
- Printing for no-profit—will be roughly \$7 per copy, for Amazon's royalties

# Sample Pages



MEG URRY

## Bona Fides

Dr. Meg Urry graduated *summa cum laude* from Tufts University with a Bachelor of Science degree in Physics and Mathematics. She received her M.S. and Ph.D. in Physics from Johns Hopkins University, completed postdoctoral fellowships at the Massachusetts Institute of Technology and NASA's Space Telescope Science Institute, where she became a tenured Astronomer and served as Head of the Science Programs Selection Office before moving to Yale. Currently, Meg is the Chair of the Department of Physics and the Israel Munson Professor of Physics and Astronomy at Yale University, as well as the Director of the Yale Center for Astronomy and Astrophysics. She is the first female tenured faculty member in the history of the Yale Physics Department and is a Fellow of the American Academy of Arts and Sciences, the American Physical Society, and American Women in Science. Meg has received several prestigious awards and honors throughout her successful career. She is a leading advocate for increasing the participation of women in science, which she refers to as her "second career."

## The Early Years

My profile is more than art, but not a class for doing physics, never liked science

- Manuscript complete, except for preface!
- Order a physical proof within the next two weeks
- Find funding sources (Yale has pledged \$500 for purchasing copies for distribution)
- Get the word out!

MEG URRY

my husband and kids!) read. I did read like a fiend, and I loved writing; I think this has helped me in writing scientific papers and in communicating science to my colleagues and to the public.

My parents – a zoologist and a chemist – really prepared me to be a natural scientist. Growing up in the Midwest and then on the East Coast, my sisters and brother and I naturally absorbed my parents' logical, methodical way of thinking. I thought everyone thought that way! I thought it was normal to ask: What do we know? What are the options? What further information do we need to find out in order to figure out the problem?

For example, on long family road trips to California, it was part of the drill to observe the natural world. After a picnic lunch, my mother would poke around in any available stream, turn over rocks and looking for worms, which she had collected in college. That was normal for us. It was part of the world around us and trying to figure it out.

When I was quite young, I liked biographies, science fiction, and science

BLAZING THE TRAIL

Winchester High School in Massachusetts, for getting me excited about chemistry. Before that, science was probably the least favorite of my classes. Later, as I started college, my parents, and particularly my father, himself a professor of chemistry, were extremely influential, suggesting that I take physics – even suggesting that astrophysics was an interesting field – and always, always encouraging me to pursue me.

## Astronomical Inspiration

I turned to

leagues, who  
are likely to  
stars came  
ip at the  
villesville,  
There I  
omical  
made  
to be

in  
s  
before  
onomy group at  
ard. More interesting  
lined that when I would go to  
... took seriously into doing astronomy. I  
summer job at the nearby Goddard Space Flight

working with their X-ray astronomy group. This led directly to my thesis research on blazars, an unusual kind of galaxy characterized by a relativistic jet pointed directly at us. (Blazars pointing elsewhere are identified as radio galaxies.) The jet appears brightened by many orders of magnitude thanks to an aberration predicted by Special Relativity. The notion that I could figure out what was happening billions of light-years away in the cosmos, from just a few particles of