

## Introduction

The twenty-second biennial conference of the Association of Christians in the Mathematical Sciences was held at [Indiana Wesleyan University](#) from May 29 until June 1, 2019. Thanks go to [Melvin Royer](#) and his colleagues at IWU for all their efforts that went into hosting it.

Many thanks also to the three invited speakers:

- [Ken Ono \(University of Virginia\)](#)

- *Why does Ramanujan, “The Man Who Knew Infinity,” Matter?*
- *The Jensen-Pólya Program for the Riemann Hypothesis*



Ken Ono (B.A., University of Chicago; Ph.D., UCLA) is the Thomas Jefferson Professor of Arts and Sciences at the University of Virginia. He has been awarded an NSF CAREER grant, a David and Lucile Packard Fellowship, a Presidential Early Career Award, and a Guggenheim Fellowship. He is currently a Vice President of the American Mathematical Society. He is a renowned expositor with recognition as the MAA George Pólya Distinguished Lecturer, and recent winner of the Prose Award for Best Scholarly Book in Mathematics. His passion for developing and sharing the ideas of Ramanujan is illustrated by his recent role as associate producer of the film *The Man Who Knew Infinity*.

- [Joan Richards \(Brown University\)](#)

- *From Theology to the Negative Numbers in the World of William Frend*
- *The Foundations of Calculus in the World of Augustus De Morgan*



Joan Richards (B.A., Radcliffe College; Ph.D., Harvard University) is the Director of the Program of Science and Technology Studies and Professor of History at Brown University. She received a Guggenheim Fellowship, and served as fellow at the Max Planck Institute. Her book *Mathematical Visions: Non-Euclidean Geometry in Victorian England* focuses on the reception of a geometrical theory in the wider culture of nineteenth century England. Her book *Angles of Reflection* is at once a memoir and an exploration of the logical work and family life of Augustus De Morgan. Her projects are linked by an abiding interest in the ways that mathematics has served as a model of human thinking.

- [Michael Alford \(FBI, Cyber Division\)](#)

- *Threats and Successes of Cybersecurity*



Michael Alford has been a Special Agent with the FBI in Indianapolis for over ten years. Special Agent Alford has a Master’s of Science in Digital Forensics from the University of Central Florida, and has over 15 years of experience in computer security and computer forensics. Special Agent Alford routinely investigates complex computer intrusions, including national security intrusions and intrusions into industrial control systems.

Two workshops were offered on May 29. [Ryan Botts](#), [Judith Canner](#), and [Alana Unfried](#) organized a seminar on using *R Studio*, and in a parallel session [Greg Crow](#), [Lori Carter](#), [Catherine Crockett](#), [Matt DeLong](#), [Derek Schurrman](#), and [Amanda Harsy Ramsey](#) discussed early career issues for new faculty and graduate students. Many thanks to them, not only for organizing the sessions, but also for the helpful information they provided.

The conference schedule is presented in [Appendix 1](#), [Appendix 2](#) gives the abstracts for the parallel sessions, and [Appendix 3](#) lists information for the individual participants.

There were a total of 79 papers presented by the 138 conference attendees. Not every paper was submitted to these *Proceedings*, but the following pages contain the ones that made their way through the single-blind review process, each having been scrutinized by a minimum of two reviewers. Thanks go to the authors for their good work. Too numerous to mention are all the referees that were involved, but heartfelt thanks go to them for their diligence.

The twenty-third biennial conference for ACMS, set to be hosted by [Azusa Pacific University](#), is slated for June 23–26, 2021. Plans are to hold it in conjunction with the [Christian Engineering Society](#). Details can be found at [acmsonline.org](http://acmsonline.org), which is the official ACMS website.

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ACMS *Proceedings* Editor