

Advancing research. Creating connections.

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Embracing Uncertainty: Navigating AI's Risks and Rewards

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What will we talk about today?

Who are we?

What is AI?

Risks

Opportunities

How to Grapple with Uncertainty

Paths to Success



Who are we?

Founded 1888

30,000 Members

promote mathematical research, its communication and uses

encourage and promote the transmission of mathematical understanding and skills

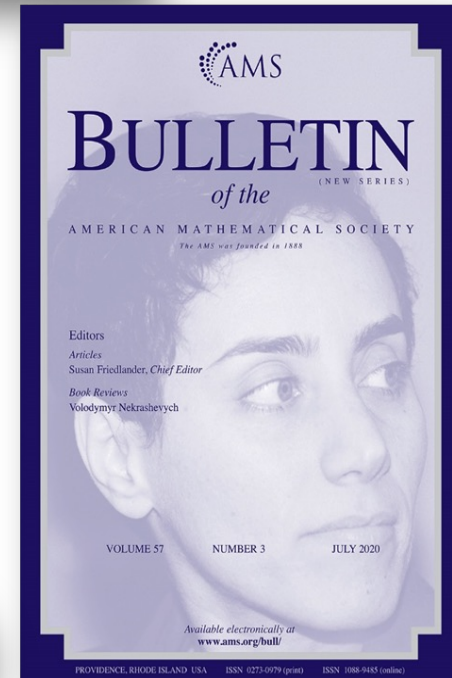
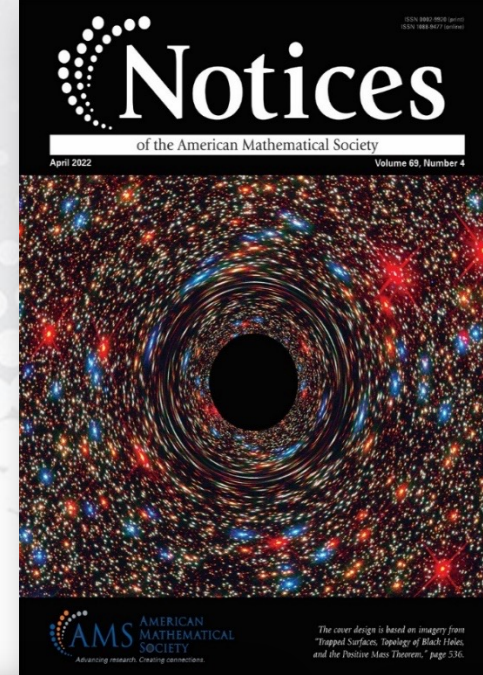
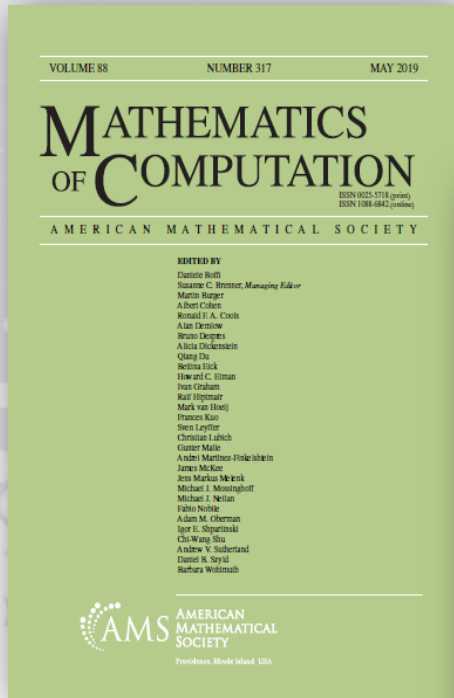
support mathematical education at all levels

advance the status of the profession of mathematics, encouraging and facilitating full participation of all individuals

foster an awareness and appreciation of mathematics and its connections to other disciplines and everyday life.



Journals





Publish 80 Books/year

- **AMS Research monographs**
- **Undergraduate and graduate textbooks**
- **General interest mathematics**
- **Conference proceedings**
- **MAA Press**
- **eBooks for individuals**
- **eBook collections for libraries**

Focus on accessible formats



Mathematical Reviews MathSciNet

- A curated database of 4+ million articles and books, with direct links to 2+ million articles in 1,800+ journals
- Publication profiles for over 1 million mathematicians
- Disambiguation (MR ID) of all authors in the database
- Bibliographic listings dating back to 1810
- Reviews from more than 20,000 research mathematicians
- Information on over 110,000 theses and dissertations

What is AI?

AI Research and Writing Tools

[Research Rabbit](#)

[Kudos](#)

[Scholarcy](#)

[Writefull](#)

[Curie](#)

[Semantic Scholar](#)

[bioRxiv](#)

[Trinka](#)

[Grammarly](#)

Useful to take a deep look at Ithaka S&R's evolving AI product tracker <https://sr.ithaka.org/our-work/generative-ai-product-tracker/>



AI LLMs

[Chat GPT \(Open AI\)](#)

[Gemini \(Google\)](#)

[Llama \(Meta\)](#)

[Curie \(Anthropic\)](#)

The Risks (that we know of)

Authority

Illegal Scraping of Copyrighted Works

Attribution

Unreliable Outputs

Machine Learning creates a “black box”

Lack of Ethical Standards

The Opportunities

AI Algorithmic Tools in Publishing Workflows

Private and Ethical LLMs

<https://medium.com/@iamamellstephen/how-to-build-a-private-llm-a-comprehensive-guide-296eae0e7db9>

AI for Social Innovation

<https://www.weforum.org/publications/ai-for-impact-artificial-intelligence-in-social-innovation/>

Pathways to Success

Human Curation

Develop an organized strategy that suits your community

e.g. AMS AI Advisory Group

Keep an open mind in a climate of fear and emotion

Innovate responsibly