



# MAA

MATHEMATICAL ASSOCIATION OF AMERICA

## JMM 2021 Crossword Puzzle

### Across

1. Quantum computation pioneer Peter
5. Swag for conference-goers, sometimes
11. “*Math Before \_\_\_\_*”: book and campaign for discussing numeracy at home with children
14. Phi = constant, in spherical coordinates
15. \* Gabriel, of Univ. of Cambridge, who will give an ASL Invited Address on model theoretic tameness in multiplicative combinatorics
16. Water, in Paris
17. Oil cartel: Abbr.
18. Mineral with formula (Ca,Na)(Mg,Fe,Al,Ti)(Si,Al)<sub>2</sub>O<sub>6</sub> which belongs to the C2/c space group
19. Famous public-key cryptosystem: Abbr.
20. \* Amie, of Univ. of Chicago, who will give an AMS-MAA Invited Address on symmetry and asymmetry in dynamics
22. Group discussion event at a conference, perhaps
24. Group of order eight (in music, at least)
25. Students in their final year of univ.
26. Yellowish brown
29. General term for an algorithm for encrypting or decrypting
32. “C’est la vie”
33. \* Chelsea, of Rice Univ., who will give both an MAA Invited Address (on collaboration) and the NAM Claytor-Woodard Lecture (on non-commutative algebra)
37. With Green, he proved that the primes contain arbitrarily long arithmetic progressions
38. Shortened version of the name of a popular 1970s band with three brothers (and the subject of a 2020 HBO documentary)

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Created by: Brendan Sullivan, Emmanuel College, Boston, MA

39. Measure theory pioneer Borel, who received the French Resistance Medal in 1950
40. Work done by exerting a force of one 56-Down for a distance of one cm
41. Mathematician Po-Shen, coach for the US IMO team
42. \* Nathan, of UC Irvine, who will give an MAA Invited Address on codes from polynomials over finite fields
43. Actor Noah of ER
44. Magic potion
46. Group with one more member than a 24-Across
47. Way to show the speaker that you’re following their talk
48. Paul J. Nahin book: “\_\_\_\_s and Escapes: The Mathematics of Pursuit and Evasion”
51. It has atomic number 18
53. \* Angela, of the Natl. Nuclear Security Admin., who will give an MAA Invited Address on next-generation AI
57. And yet
58. David Berlinski book: “*Infinite \_\_\_\_: A Short History of Mathematics*”
60. “Don’t go!”
61. Chess rating system
62. Frolic
63. Physics Nobelist Murray Gell-\_\_\_\_
64. Function in python that returns the number of characters in a string
65. \* Stephanie, of Portland State Univ. and The Verified Voting Found., who will give an MAA Invited Address on using anomaly detection in elections
66. Word that joins “if” to make “elif”

## Down

1. Flat-bottomed boat
2. Native American tribe of northeastern Arizona
3. First-year law school student, for short
4. Plays with sand like Archimedes did in one of his works?
5. Insufficient, as evidence
6. Winner at the casino, ultimately
7. Block of metal
8. Precipitation
9.  $C_6H_2(NO_2)_3CH_3$
10. Becomes involved to help a situation
11. \* Anton, of Georgia Inst. of Tech., who will give an ASL Invited Address on descriptive combinatorics and distributed algorithms
12. Opposite of difficulty
13. Term for the space of all linear functionals on a given vector space
21. Frigid
23. Abstract artist Hans/Jean
26. List of logarithms, e.g.
27. Star in the Perseus constellation, or term for a particular family of programming languages
28. \* Talitha, of Clark Atlanta Univ., who will give the NAM Cox-Talbot Address on advancements in data science at Historically Black Colleges and Univs.
29. Last name of the directors of *Fargo*
30. \_\_\_\_ Raymond Hedrick, first president of the MAA
31. Thesaurus eponym
33. Have on
34. A Coulomb per second, for short
35. Rapper Wayne or Uzi Vert
36. Self-referential term for an abbr. of a certain length
42. Abducts
43. Exclamation of sorrow
45. Losing row in tic-tac-toe
46. Agcy. that funds research
48. Mathematician Eugenia, author of *How to Bake Pi* and *Beyond Infinity*
49. Word you might use in a proof when you've used "therefore" too many times already
50. Subsequently
51. 19th century Norwegian mathematician who is the namesake for a prominent prize
52. L'Hopital has one in calculus, and Cramer has one in linear algebra
53. Convert paper to pdf, perhaps
54. Phrase used when citing a paper with many authors
55. Some computer connections, popular in gaming
56. Unit of force, 1 g cm/s<sup>2</sup>
59. \_\_\_\_ Lanka

Submit your puzzle for a chance to win an Amazon gift card by 5 pm MT on Friday, January 8. Email completed puzzle to [pavilion@maa.org](mailto:pavilion@maa.org).