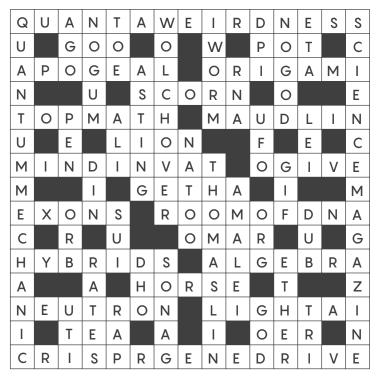


Solution



ACROSS

- 1. Initial plurality of Einstein's spooky action at a distance as described by yours truly: the answer illustrates itself! (6,9)
- Rennie shows you beautiful microbial intelligence in what basically looks like this (3)
- A technical term for a concoction of cannabinoids? (3)
- 13. The kind of moon that is far, far away (7)
- 15. Kinks and folds in this can cause phase transitions (Woo) (7)
- 17. Einstein treated reported experimental errors in relativity with this (5)
- 18. Two words, in sequence, that describe the kind of writers Hartnett and Klarreich are (3,4)
- 21. Seems overly sentimental, but it's a quantum philosopher who says our gut intuitions about time are right (Musser) (7)
- 24. Locklear writes that we need to go to the mountains to find the kind of species that some retroviruses jump to (4)

- 26. Philosophical argument about consciousness, imagining a brain in a container? (4,2,3)
 29. Cumulative frequency
- graph exhorting us to donate to charity? (5)/ (1,4)
- 31. Obtain laugh, or sound sleep on a latex foam mattress from Malaysia? (3,2)/(5)
- 33. Gene portions that give rise to mature RNA have disoriented ex-son (5)
- 36. The place in the lab where the PCR machines are kept might well be called this (4,2,3)
- 39. Song in a new musical about a visiting band recalls a dashing film star (4)
- 40. Cepelewicz explains how these have played a crucial role in the evolution of species (7)
- 44. X marks the unknown in this discipline, whose connection to a monster is elucidated by Honner (7)
- Evolution of this fastrunning species can run slowly over long time periods, writes Arnold (5)
- 47. Re-created one-turn

particle stars, lately appearing in articles by Sokol, Moskvitch and Wolchover (7)

- 50. Photic artificial intelligence required to reveal a not-too-heavy sloth? (5,2)
- 53. Confusedly ate a beverage containing polyphenols? (3)
- 54. Finished without 5 Romans, poetically (3)
- 55. Telling the toastiersounding Eugene to take the wheel? Borel warns that it may result in species extinction! (6,4,5)

DOWN

- 1. Can she simultaneously fix Schrödinger's car and break it too? Yes, just much faster than her regular counterparts! (7,8)
- 2. Gave a try a long time previously (1,2)/(3)
- Pidgin phrase describing what heat doesn't do to most proteins before cell death. Greenwood describes it better (2,3)
- 4. The hallux is the biggest one (3)
- 5. Quanta Magazine physics writer who is a mixedchow lover (9)
- 6. A rare Mac bug that confesses who it is, Apple style (5)
- 7. Abbreviated measure of resolution (3)
- Atheist's declaration, or theist's remonstrance (2,3)
- 9. Greek letter to show how fast learning happens, I say (3)
- 10. What Quanta is to readers (7,8)
- 14. Something queens and workers have but drones lack, no matter how high they fly! (1,5)
- This genetic material may not have been so important to life ages ago, but bacteria today give it the highest priority (Cepelewicz both times) (3)
- 19. Writers may wield it mightily to create an enclosure (3)

- 20. A lithium salt is required to contain the greatest (3)
- 22. This flyer is a mystery. But don't worry, the Pentagon is on it (3)
- 23. You get a flower garland for unscrambling a mathematical group (3)
- 25. A journey from sodium to oxygen? (2,2,1)
- 27. I'd call it this when it exceeds 75 dB (3)
- Quanta editor to reorganize lion's math! (6,3)
- 30. Chopped-up fig makes for a moving internet picture (3)
- 32. A mother solves a mixed mathematical group, something that would require a man to be steeped in artificial intelligence (1,2,3)
- 34. A round globe; add it, and it usually becomes elliptical (3)
- 35. It's classical, and it could become a class by itself if you add something that sounds generous (3)
- It's usually a nonprofit: an addition would situate it in a church (3)
- Someone else will speak for you if you stand up, bud (3)
- 41. Measures of change may transmute to lacrimation (5)
- 42. Half light, half heavy water (3)
- 43. Boy, there's silver: therefore annoy me (3,2)/ (2,3)
- 45. It was once said to fill the universe. No more. But it can still knock you out! (5)
- 48. Frequency might be a cause of this urological diagnosis (3)
- 49. Equality turned upside down gives rhythmic fast talk (3)
- 51. It's almost ~8D, in symbolic logic (3)
- 52. It takes three similar atoms in a molecule to sound like they're making an effort (3)

