

# The Puzzle Corner

This edition's crossword puzzle celebrates "Connecting Worlds," the theme of the 2012 Quadrennial Physics Congress (PhysCon). SPS communications specialist Elizabeth Hook constructed this delightful brainteaser.

## Fall Contest Winner

Congratulations to Dr. Diedrich Schmidt, of North Carolina A&T State University, for being the first respondent to correctly solve last fall's moon-earth orbit puzzle.

## Prizes

For each physics puzzle, the submitter of the first correct answer, and a second chosen at random from all correct answers will be awarded a \$25 gift card for a book vendor of the winner's choice, and the winners' names will appear in the next issue of *Radiations*.

## Call for Puzzles

We welcome any interesting puzzles you may have to share with your fellow alumni. As a token of our appreciation, we will send a \$25 gift card to the submitter of each original puzzle we accept. Please submit your puzzles to Sigma Pi Sigma Puzzle Corner, One Physics Ellipse, College Park, MD 20740, or by email to [sps@aip.org](mailto:sps@aip.org).

## Across

2. Science advisor for 6-across & plenary speaker at 38-down.
6. A popular American sitcom, also the prevailing model for the development of the early universe.
8. Variety; a range of different things; a good thing to have in any group.
11. Plenary speaker at 38-down, discoverer of pulsars.
12. To publicly display; there were 60 at 38-down.
14. The first plenary speaker at 38-down and an astronaut known as the Hubble repairman (also for eating peanut butter and raspberry sandwiches in space).
15. The second administrator of 27-across.
16. Investigation; study; expedition.
18. Plenary speaker at 38-down, specializes in the detection and characterization of exoplanets.
20. Dr. Lee Sawyer led a workshop at 38-down on connecting science and this.
22. (pl) The study of the behavior of light.
23. Scientist who specializes in tomography, she spoke at 38-down
24. The community associated with the pursuit of research & education.
27. Federal agency responsible for the civilian space program and aeronautics and aerospace research.

Please submit your answers to the physics puzzles by surface mail to ΣΠΣ Puzzle Corner, One Physics Ellipse, College Park, MD 20740, or by email to [sps@aip.org](mailto:sps@aip.org).

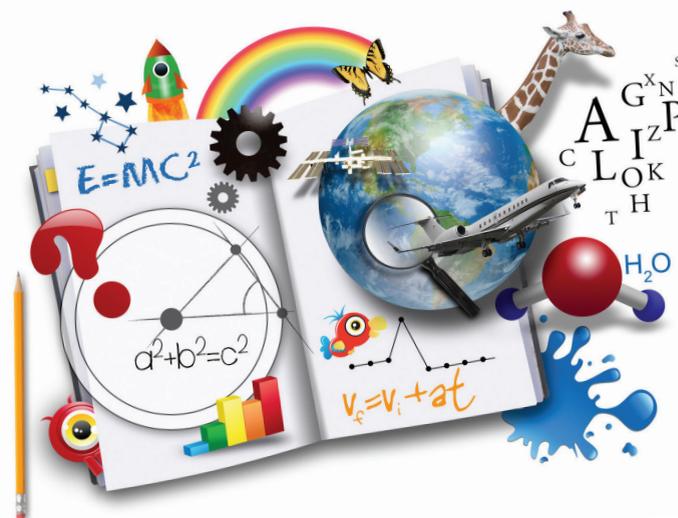
## Deadline

15 September 2013

## Answers

Answers will appear at [www.sigmapi-sigma.org/radiations/puzzlecorner/](http://www.sigmapi-sigma.org/radiations/puzzlecorner/) in late September.

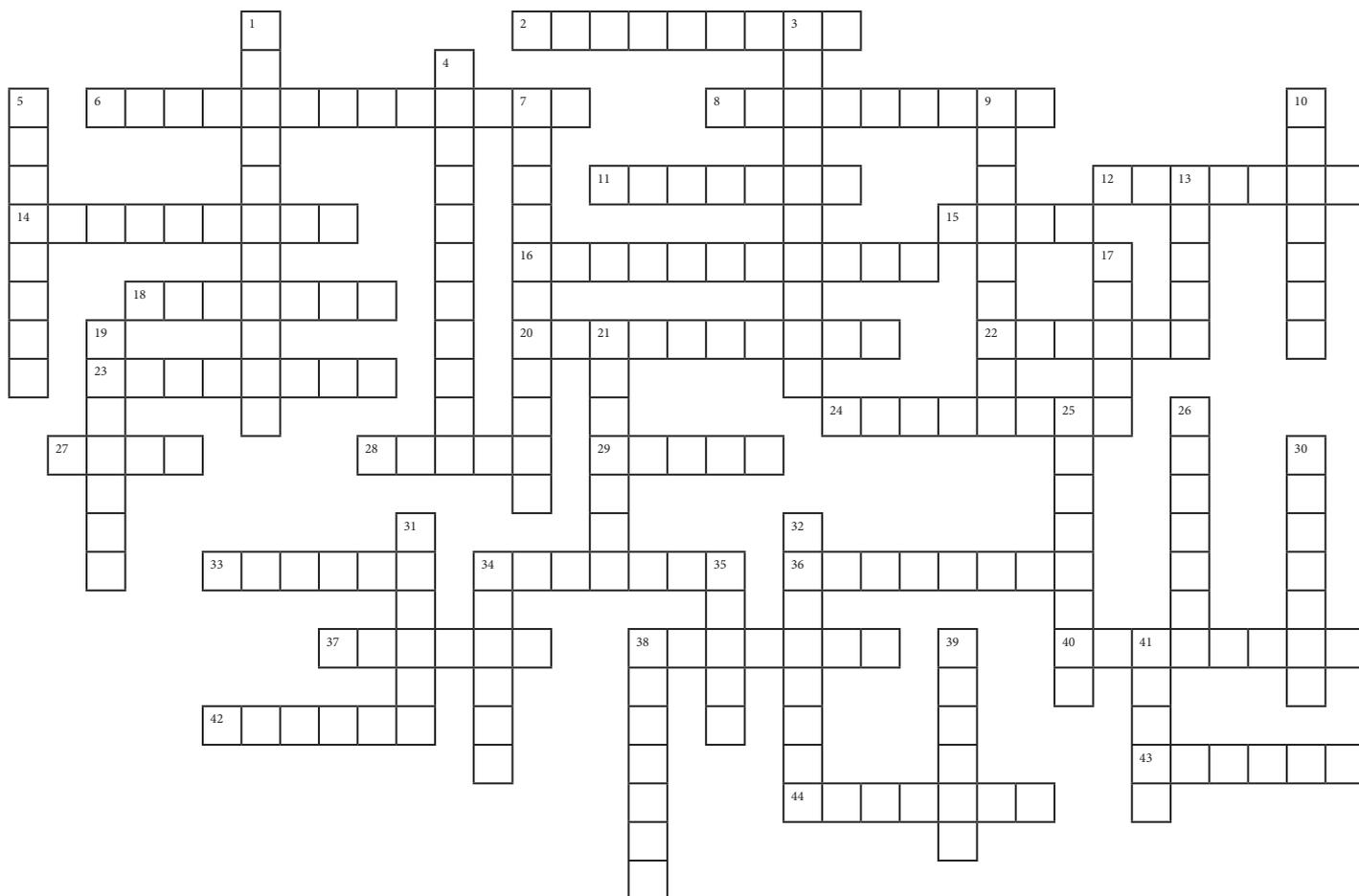
Scan with a QR code reader on your smart phone or tablet to see the puzzles and answers online.



28. Plenary speaker at 38-across; former CERN CMS program manager and chair of the CMS collaboration.
29. The third planet from the sun in our solar system.
33. The phenomena of the physical world collectively; also a scientific journal.
34. The scientific discipline that studies how the universe behaves.
36. This shuttle had just arrived in Florida when 38-down took place.
37. Astronomer; the space 9-down launched in 1990 was named for him.
38. (pl) In 2006 the IAU redefined the definition for these celestial bodies and excluded Pluto.
40. Systematic investigation; many students presented information on theirs at 38-down.
42. Plenary speaker at 38-down; astrophysicist who received the Nobel Prize in Physics in 2006.
43. A vehicle that obtains thrust from the combustion of its contents.
44. 35th President of the United States; the 27-across space center in Florida is named after him.

# Connecting Worlds

by Elizabeth Hook, SPS Communications Specialist



## Down

1. Once every four years.
3. A dramatic and wide reaching change. At 38-down, Dyson gave a lecture on four of these.
4. A point of view.
5. A meeting (or series of meetings) for discussion; a national legislative body.
7. (pl) The throwing back by a body or surface of light, heat, or sound without absorption; serious thoughts and considerations.
9. 37-across and 15-across are both one of these (in space).
10. @SPS\_physicsnews & @SPSwebster are on this social network.
13. The newest subatomic particle, named for this physicist that postulated its existence.
17. The chapter that traveled the farthest to 38-down was from this country.
19. 38-down was held in this city.

21. (pl) Occupations.
25. Manufacturing, production.
26. The action of helping or doing work for someone.
30. The systematic study of the structure and behavior of the natural and physical world through observation and experiment
31. An individual that belongs to a group (like Sigma Pi Sigma).
32. A social networking site, where SPS and Sigma Pi Sigma can interact with its members and keep them updated on goings-on in science & the National Office.
34. A course of action adopted or proposed by a government.
35. The near vacuum between planets and stars, containing small amounts of gas and dust.
38. Abbreviation for the most recent Sigma Pi Sigma Congress.
39. Students gave these types of presentations at 38-down.
41. (pl) The luminous objects in the night sky.