

Year in Review—The most important research of 2015: February

December 11 2015, by Bob Yirka

This is an artist's concept of the metric expansion of space, where space (including hypothetical non-observable portions of the universe) is represented at each time by the circular sections. Note on the left the dramatic expansion (not to scale) occurring in the inflationary epoch, and at the center the expansion acceleration. The scheme is decorated with WMAP images on the left and with the representation of stars at the appropriate level of development. Credit: NASA

(ScienceX)—In this new series, we're offering summary articles featuring

links to some of the most interesting, intriguing or popular stories that appeared on ScienceX throughout 2015. This is the February 2015 edition.

In physics news, researchers Ahmed Farag Ali and Saurya Das proposed that there might not ever have been a Big Bang after all, suggesting that their [quantum equation predicted the universe had no beginning](#), contradicting the commonly held theory that the universe is approximately 13.8 billion years old. And researchers Radu Ionicioiu, Robert B. Mann and Daniel R. Terno asked, [could classical theory be just as weird as quantum theory?](#) They think maybe so, because they were able to show that determinism, objectivity and independence are mutually incompatible in both theories.

In news from space, a team with Cornell University concluded that, [life 'not as we know it' was possible on Saturn's moon Titan](#)—possibly a type based on methane living an oxygen-free life. Also, amateur astronomers reported seeing [a 'cloud' over Mars that left scientists baffled](#) in the form of plumes stretching very high above the Martian surface; experts could not say what they were. And another international team of astronomers calculated that approximately 70,000 years ago, there was [a close call of 0.8 light years](#)—a dim star likely passed through the Oort Cloud.

In technology news, [the U.S. Navy unveiled a firefighting robot prototype at a tech expo](#)—the [robot](#) was able to walk across uneven floors, use a hose to put out a small fire and used thermal imaging to identify objects. Also a combined team of researchers from the U.S., Britain and Singapore announced that they had developed [an octopus robot that made waves with its ultra-fast propulsion](#)—it was able to move through water and accelerate faster than any other underwater vehicle.

In other news, a group of health workers led by a team with Johns Hopkins University announced that they had found that [a popular soda ingredient posed a cancer risk to consumers](#)—4-methylimidazole, found

in caramel coloring could be harmful, they found, when consumers drink more than one can of soda per day. And an international team of researchers discovered [an organism that hasn't evolved in more than 2 billion years](#)—in the deep sea. And another team of [researchers](#) at Yale University found that [sunlight continues to damage skin in the dark](#)—exposure to UV radiation, they found caused damage for several hours after exposure, even in a completely dark room.

The January 2015 edition of our Year in Review series can be read [here](#).

© 2015 ScienceX

Citation: Year in Review—The most important research of 2015: February (2015, December 11) retrieved 4 May 2024 from

<https://sciencex.com/news/2015-12-year-reviewthe-important-february.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--