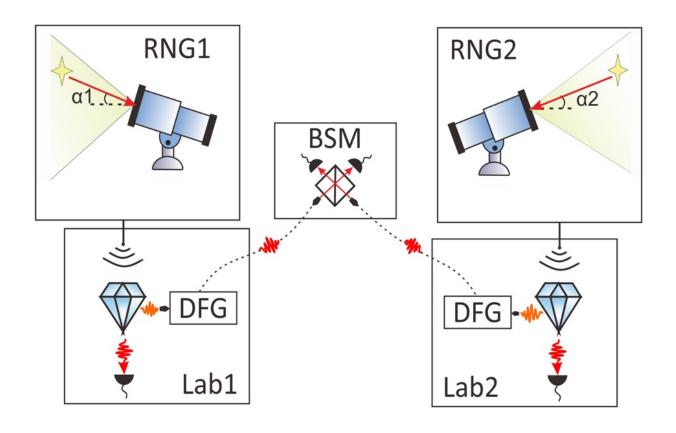
## Best of Last Week – Using stars as random number generator, Antarctica greening and eye drops treat macular degeneration

May 22 2017, by Bob Yirka



The proposed Bell test uses stars and quasars as random number generators to address the freedom-of-choice loophole and show that the quantum world does not obey local realism. Credit: Wu et al. ©2017 American Physical Society

(ScienceX)—It was a good week for physics as a team in China

suggested that <u>using stars as random number generators could test the</u> <u>foundations of physics</u> by progressively addressing another loophole in the Bell tests. Also, an international team of physicists used <u>Einstein's "spooky" entanglement to invent a super-sensitive gravitational wave detector</u>. The new design is considered a breakthrough because it allows for measuring below the standard quantum limit, which until recently was considered to be impossible.

In environmental news, pair of researchers, Jennifer Lavers and Alexander Bond, found that there is <u>37 million pieces of litter on one of the world's most remote islands</u>, demonstrating that there is no escaping ocean plastic. Henderson Island is 5000 kilometers from the nearest major population center, yet it has the highest concentration of plastic trash reported anywhere on the planet. A team in the U.K. found that <u>Antarctica is "greening" due to climate change</u>—major biological changes have occurred over the past 50 years, they report, as rising temperatures have led to an increase in plant growth, particularly moss.

There were technology developments as well, as a team at MIT showed off a self-ventilating workout suit that keeps athletes cool and dry. And a team at the University of Houston announced that they had discovered a new, more efficient catalyst for water splitting that uses inexpensive and readily available materials. A team from Northwestern University Feinberg School of Medicine and McCormick School of Engineering announced that they had used a 3-D printer to make ovaries that produced healthy offspring—the printed structures provided the framework for housing immature eggs. And a team from the University of California announced that they had developed a nano-fiber that detects forces and hears sounds made by cells, such as bacteria swimming and heart muscle cells beating.

And finally, if you are one of the millions around the world suffering vision loss due to macular degeneration, help may be on the way. A team

of researchers at the University of Birmingham in the U.K. announced that they had developed <u>revolutionary eye drops to treat age-related</u> <u>blindness</u>—it is based on a cell-penetrating peptide that is able to deliver a drug to the relevant part of the eye.

## © 2017 ScienceX

Citation: Best of Last Week – Using stars as random number generator, Antarctica greening and eye drops treat macular degeneration (2017, May 22) retrieved 5 July 2025 from <a href="https://sciencex.com/news/2017-05-week-stars-random-antarctica-greening.html">https://sciencex.com/news/2017-05-week-stars-random-antarctica-greening.html</a>

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.