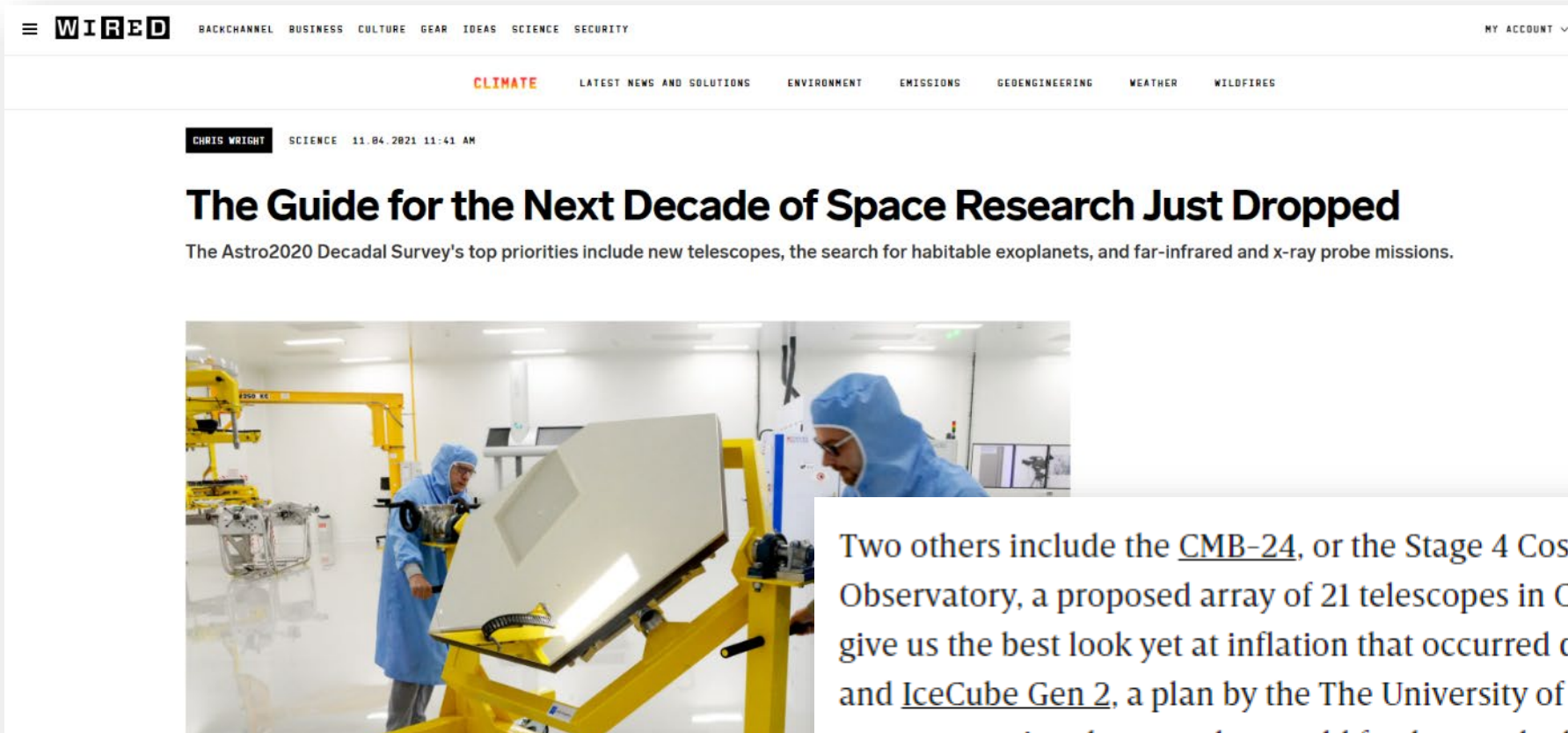


IceCube-Gen2 in the News

Madeleine O'Keefe, Comms Manager (until 11/19)

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<https://www.wired.com/story/the-guide-for-the-next-decade-of-space-research-just-dropped/>



Two others include the CMB-24, or the Stage 4 Cosmic Microwave Background Observatory, a proposed array of 21 telescopes in Chile and the South Pole that would give us the best look yet at inflation that occurred during and just after the Big Bang; and IceCube Gen 2, a plan by the The University of Wisconsin–Madison to build a high-energy neutrino detector that could further study the high-energy neutrino particles that occasionally whizz into Earth from ... somewhere. (The current IceCube, located in Antarctica, detected the first cosmic neutrinos in 2013.)

Ars Technica

<https://arstechnica.com/science/2021/11/new-astronomy-roadmap-calls-for-huge-broad-spectrum-space-telescope/>



BIZ & IT TECH **SCIENCE** POLICY CARS GAMING & CULTURE STORE

THINKING BIG —

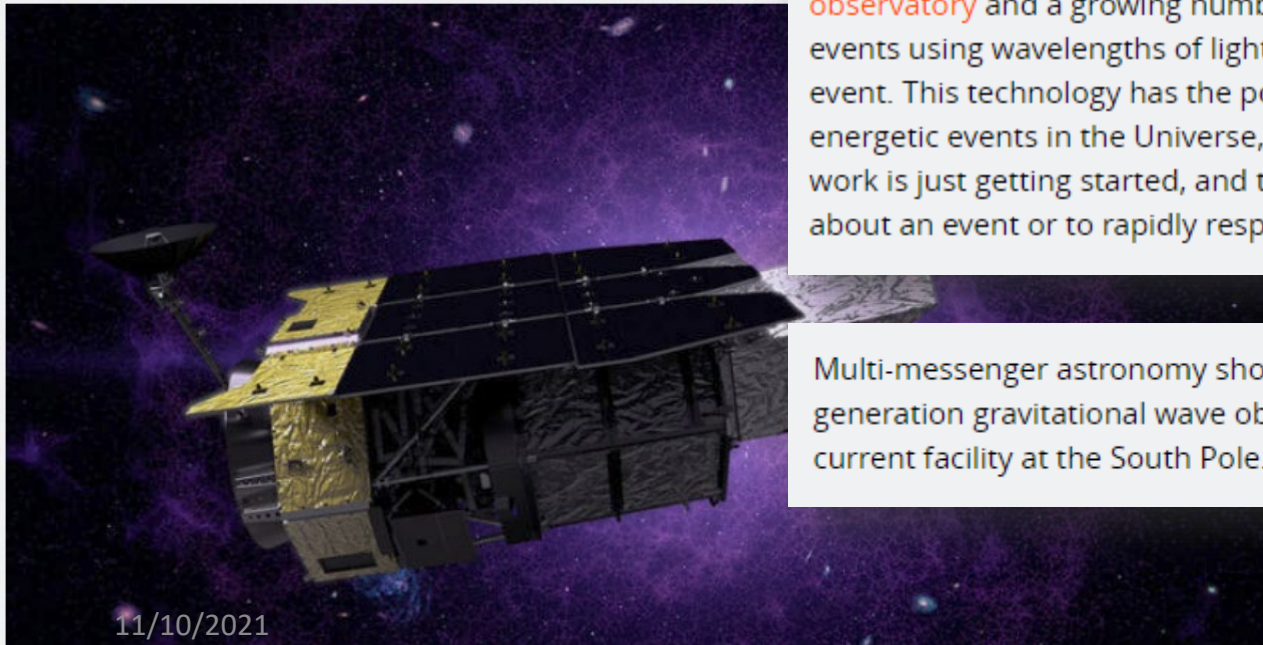
New astronomy roadmap calls for huge, broad-spectrum space telescope

The decadal survey is a highly influential 10-year plan for what should come next.

JOHN TIMMER - 11/4/2021, 3:48 PM

The final item on the list is what is termed "multi-messenger astronomy." Thanks to the **IceCube neutrino observatory** and a growing number of **gravitational wave detectors**, we can now simultaneously observe events using wavelengths of light, changes to the fabric of space, and subatomic particles produced by the event. This technology has the potential to provide a far more complete picture of some of the most energetic events in the Universe, from the deaths of massive stars to the mergers of black holes. This sort of work is just getting started, and there's potential to expand the list of hardware that alerts astronomers about an event or to rapidly respond to these alerts in order to provide observations.

Multi-messenger astronomy should get a boost through continued funding to develop technology for next-generation gravitational wave observatories. Also favored: funding for IceCube 2, an expanded version of the current facility at the South Pole.



11/10/2021

Scientific American

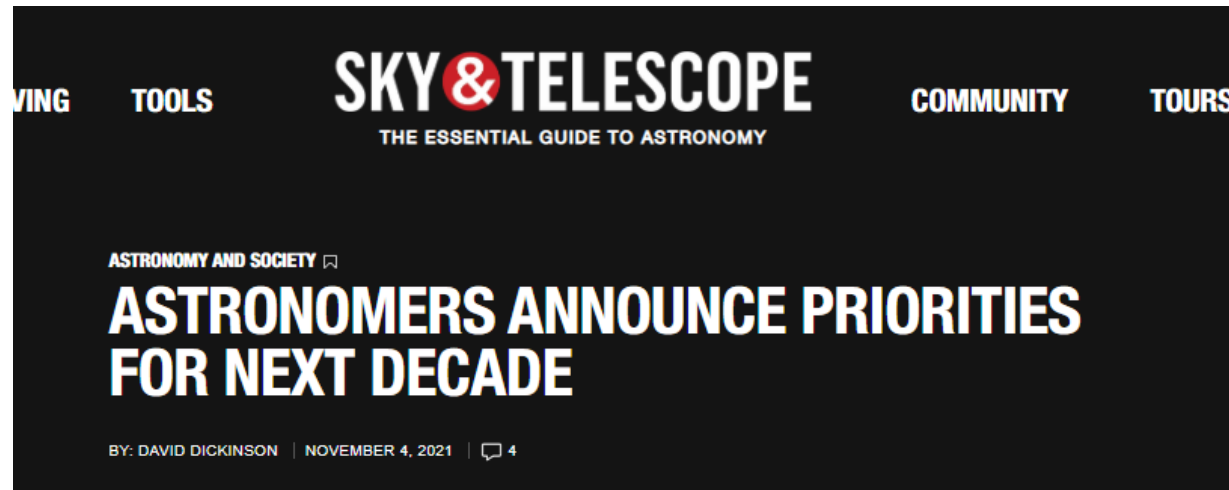
<https://www.scientificamerican.com/article/hunt-for-alien-life-tops-next-gen-wish-list-for-u-s-astronomy/>



Other than helping these twin titans across the finish line, the report also recommends that the NSF and DOE jointly spend \$660 million to create the Cosmic Microwave Background Stage 4 Observatory (CMB-S4), a facility to survey the big bang's afterglow in exquisite detail. An additional \$2.5 billion of NSF funds would go to building the Next-Generation Very Large Array (ngVLA), a radio observatory that would be 10 times more sensitive than the aging facilities it would replace. Additionally, *Astro2020* strongly endorses further upgrades to two projects opening entirely novel windows on the cosmos: the Laser Interferometer Gravitational-Wave Observatory (LIGO) and to the IceCube Neutrino Observatory, a facility with thousands of detectors arranged within a cubic kilometer of Antarctic ice. Paired with traditional observatories, LIGO and IceCube can help astronomers divine the arcane mechanics at play within the cores of exploding suns and between merging black holes and neutron stars.

Sky & Telescope

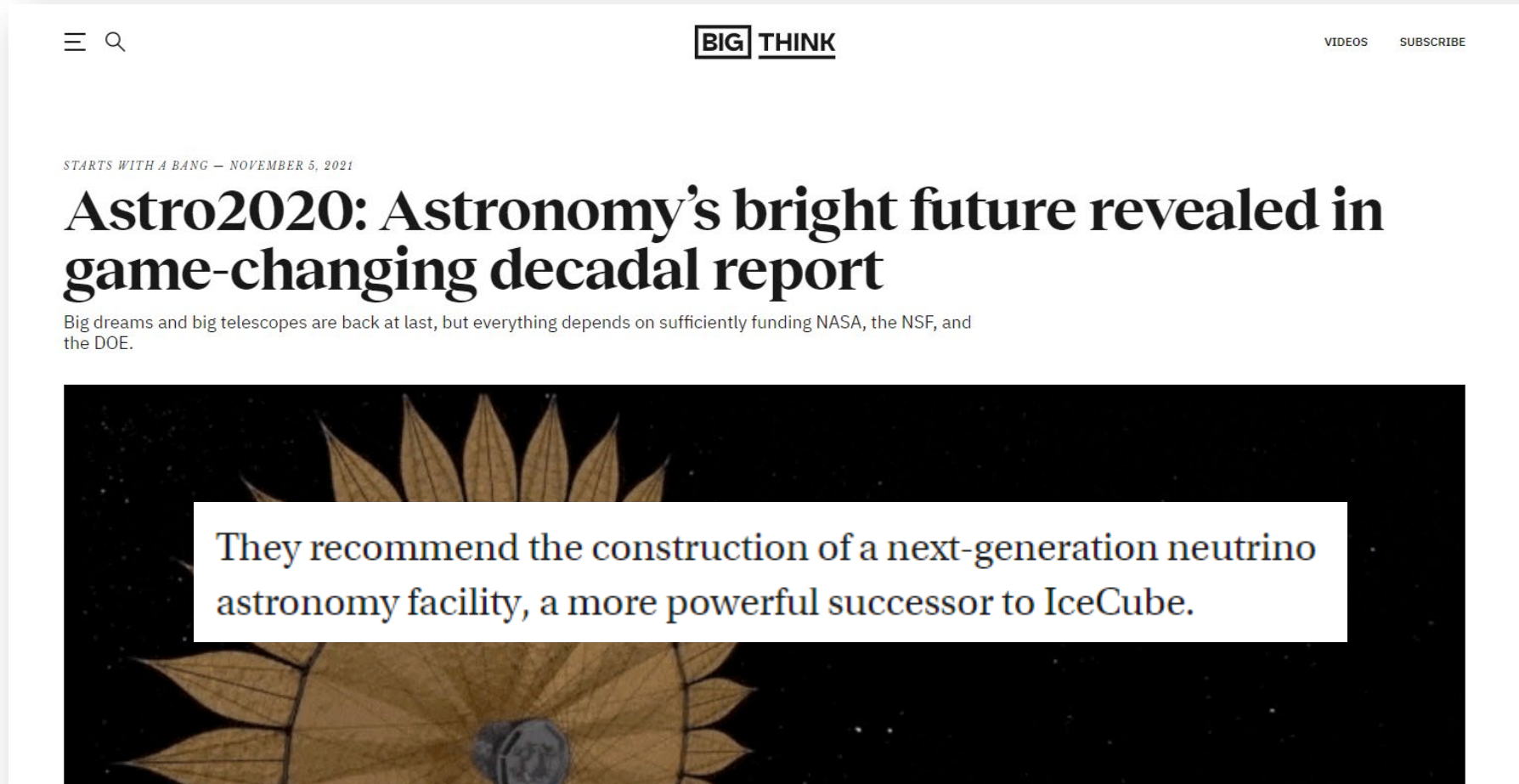
<https://skyandtelescope.org/astronomy-news/astronomers-announce-priorities-for-next-decade/>



The survey recommends continued investment in the Laser Interferometer Gravitational-Wave Observatory (LIGO), along with preparations for a next-generation facility. And the report advocates further study of high-energy neutrinos, as part of the multi-messenger theme. To this end, the IceCube-Generation 2 Neutrino Observatory would supersede Ice Cube in the Antarctic, with a capability to resolve discrete sources and detect neutrinos at higher energies.


Big Think

<https://bigthink.com/starts-with-a-bang/future-astro2020-decadal/>



A quick note about “branding”

From the decadal (page 30)



It is also essential to astronomy that the Karl Jansky Very Large Array (JVLA) and Very Long Baseline Array (VLBA), which have been the world-leading radio observatories, be replaced by an observatory that can achieve roughly an order of magnitude improvement in sensitivity compared to those facilities. **The Next Generation Very Large Array (ngVLA)** will achieve this, with a phased approach where design, prototyping, and cost studies are completed and reviewed in advance of commencing construction. Finally, neutrino observations are important to understanding some of the most energetic processes in the universe, and the Ice Cube-Generation 2 (IceCube-Gen2) observatory will make advances in important astrophysics questions, although it is beyond the charge of this survey to recommend it.⁴

- Disclaimer: We can only do so much to control how the press/media spells our name.
- Still, it is important to be consistent in how we refer to **IceCube-Gen2**.
 - We are not:
 - IceCube Generation-2
 - Ice Cube Gen2
 - IceCube gen-2
 - IceCube 2
- IceCube branding page coming soon!