productive environment for everyone, regardless of their ethnic origin. We also hope that scientific collaborations and exchanges between the United States and foreign academic communities will be strengthened rather than suppressed. American scientific advances and technological innovations are the result of global efforts, and their future depends on the continuation of time-tested traditions of openness and cooperation on the global stage.

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The views expressed in this Letter are solely those of the authors and the three organizations, not the affiliated institutions of the authors.

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10.1126/science.aaw6854

Response

The National Institutes of Health (NIH) appreciates the concerns expressed in the thoughtful letter from Lu *et al.* on behalf of the Society of Chinese Bioscientists in America, the Chinese American Hematologist and Oncologist Network, and the Chinese Biological Investigators Society. NIH greatly values scientists of Chinese descent as members of the American biomedical research enterprise. For decades, scientists of Chinese descent have contributed substantially to scientific innovations at research institutions across the United States. Collaborations with Chinese institutions have been critical to moving science forward. The vast majority of Chinese scientists working in America are honorable, conscientious, and dedicated to the cause of expanding knowledge for the betterment of humankind.

Unfortunately, instances have recently come to light where certain scientists, including some with links to foreign institutions and/or governments, have violated the honor-based systems and practices of the American research enterprise (1). Convened to address the issue, The NIH Advisory Committee to the Director working group (2) carefully considered how to ensure fairness of the grant process and intellectual property principles, while seeking to minimize jeopardy to innocent foreign nationals and important international collaborations. The working group recommendations apply to all foreign scientists, not just those of Chinese descent.

We are determined to maintain the integrity of the NIH research enterprise, but we are also deeply concerned about the issues raised by these three societies. NIH is committed to avoiding overreaction, stigmatization, harassment, and profiling. We will use our influence and bully pulpit as necessary to speak out against such prejudicial actions, for which there is no place in the biomedical research community.

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10.1126/science.aaw8810

TECHNICAL COMMENT ABSTRACTS

Comment on "Insulator-metal transition in dense fluid deuterium"

Michael P. Desjarlais, Marcus D. Knudson, Ronald Redmer

Celliers *et al.* (Reports, 17 August 2018, p. 677), in an attempt to reconcile differences in inferred metallization pressures, provide an alternative temperature analysis of the Knudson *et al.* experiments (Reports, 26 June 2015, p. 1455). We show that this reanalysis implies an anomalously low specific heat for the metallic fluid that is clearly inconsistent with first-principles calculations.

Full text: dx.doi.org/10.1126/science.aaw0969

Response to Comment on "Insulator-metal transition in dense fluid deuterium"

Peter M. Celliers, Marius Millot, Stephanie Brygoo, R. Stewart McWilliams, Dayne E. Fratanduono, J. Ryan Rygg, Alexander F. Goncharov, Paul Loubeyre, Jon H. Eggert, J. Luc Peterson, Nathan B. Meezan, Sebastien Le Pape, Gilbert W. Collins, Raymond Jeanloz, Russell J. Hemley

In their comment, Desjarlais *et al.* claim that a small temperature drop occurs after isentropic compression of fluid deuterium through the first-order insulator-metal transition. We show that their calculations do not correspond to the experimental thermodynamic path, and that thermodynamic integrations with parameters from first-principles calculations produce results in agreement with our original estimate of the temperature drop.

Full text: dx.doi.org/10.1126/science.aaw1970

ERRATA

Erratum for the Perspective "How fast are the oceans warming?" by L. Cheng *et al.*, *Science* **363**, eaax1875 (2019). Published online 8 March 2019; 10.1126/science.aax1875

Erratum for the Research Article "Pan-tumor genomic biomarkers for PD-1 checkpoint blockade-based immunotherapy" by R. Cristescu *et al.*, *Science* **363**, eaax1384 (2019). Published online 1 March 2019; 10.1126/science.aax1384

Experimenting with light can reveal the limits of human perception.

OUTSIDE THE TOWER

Empowering young innovators

We are surrounded by a group of high school and college students in Mérida, Mexico, in a classroom that is completely dark except for beams of colored light. We are using a black box full of LEDs to irradiate colored objects with a specific frequency of light. One student manipulates the dial on the box, and the beams gradually shift from a monochromatic deep red to bright blue to pure white. With this tool, called an iLuminator, we can explore the limitations of human vision. Students learn that light consists of a continuum of different wavelengths and that our perception of color is constrained by our three different types of color receptors. One student comments that some objects that she perceives as orange under ambient light brightly reflect both red and green spectral light, revealing their "true" color spectrum.

T.S.L.—a graduate student at the Massachusetts Institute of Technology (MIT)—and Martin Zumaya—a physics graduate student in Mexico—were paired to collaborate on this workshop by Science Clubs International (SCI) (1). For 4 months in 2016, we worked together to design our workshop. We successfully combined T.S.L.'s engineering background and experience abroad in the United States with Martin's physics expertise and knowledge about the resources available in Mexico.

After demonstrating the iLuminator, we show the students how to take pictures with a hyperspectral camera, which can identify spectral characteristics that are not visible to the naked eye, and then process the images with a python script. It is gratifying to see the students' expressions when they see a black-and-white representation of ultraviolet light reflected from a butterfly's wings for the first time. The students immediately begin to tweak their image analysis code, coming up with their own ways to dynamically display higher dimensional color data on their computer screens.

Over the years, we've taught similar workshops in Peru, Paraguay, Bolivia, Spain, and at MIT. We have seen the impact that the SCI program has on the lives of students, instructors, and local collaborators. Many alumni students have gone on to participate in summer research programs, and the program has sparked collaborations among instructors and fostered an international network of young scientists. By connecting talented youth in developing countries with mentors, SCI's workshops and collaborations have the potential to empower and nurture the next generation of scientists and innovators.

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ACKNOWLEDGMENTS

The authors thank Frank Wilczek, MIT, and SCI team members for their contributions to the SCI program.

10.1126/science.aaw0564

Response

Francis S. Collins, Lawrence A. Tabak, Carrie D. Wolinetz, Michael S. Lauer and Michael M. Gottesman

Science **363** (6433), 1292-1294.
DOI: 10.1126/science.aaw8810

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