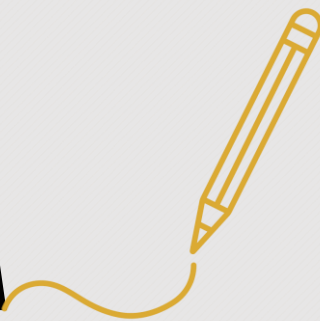


FINDING A VOICE IN SCIENCE JOURNALISM



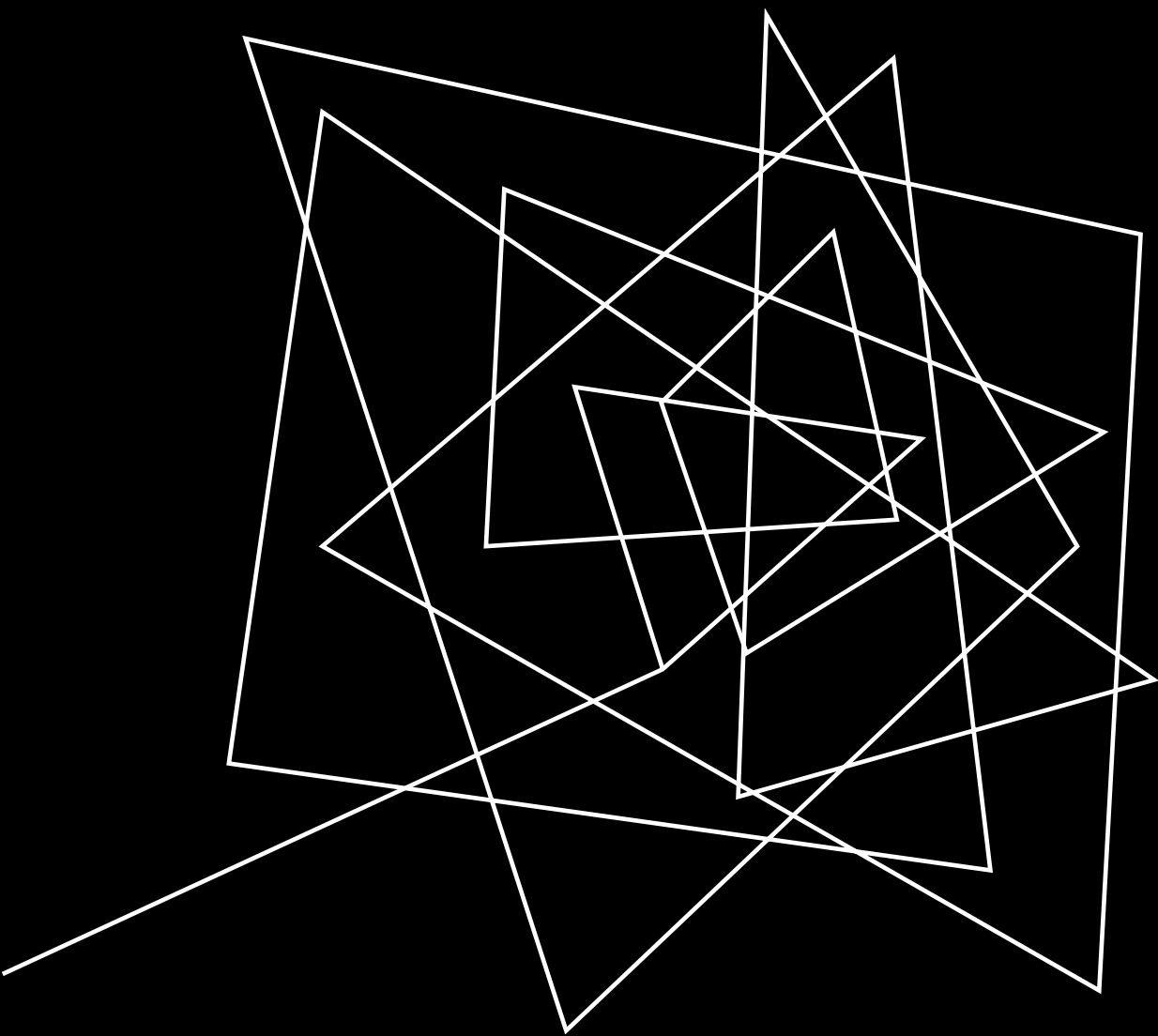
Hannah Means

Physics Today Writing Intern



**PHYSICS
TODAY**





CREATING AN **ARTICLE**

FINDING TO FINAL PRODUCT (1/2)

A NEW RESULT

Identify a new study, discovery, or event that seems of interest to PT readers

RESEARCHING THE
BASICS

Research the topic until the basic background information is understood

INTERVIEWS

Get in contact with the researcher(s) that can answer questions, and interview them

FIND THE STORY

Review information from research/interviews and decide where the story lies, if at all

FINDING TO FINAL PRODUCT (2/2)

FIRST DRAFT

Write the first draft (keeping in mind where the story may require more follow up with researchers/experts)

EDITING

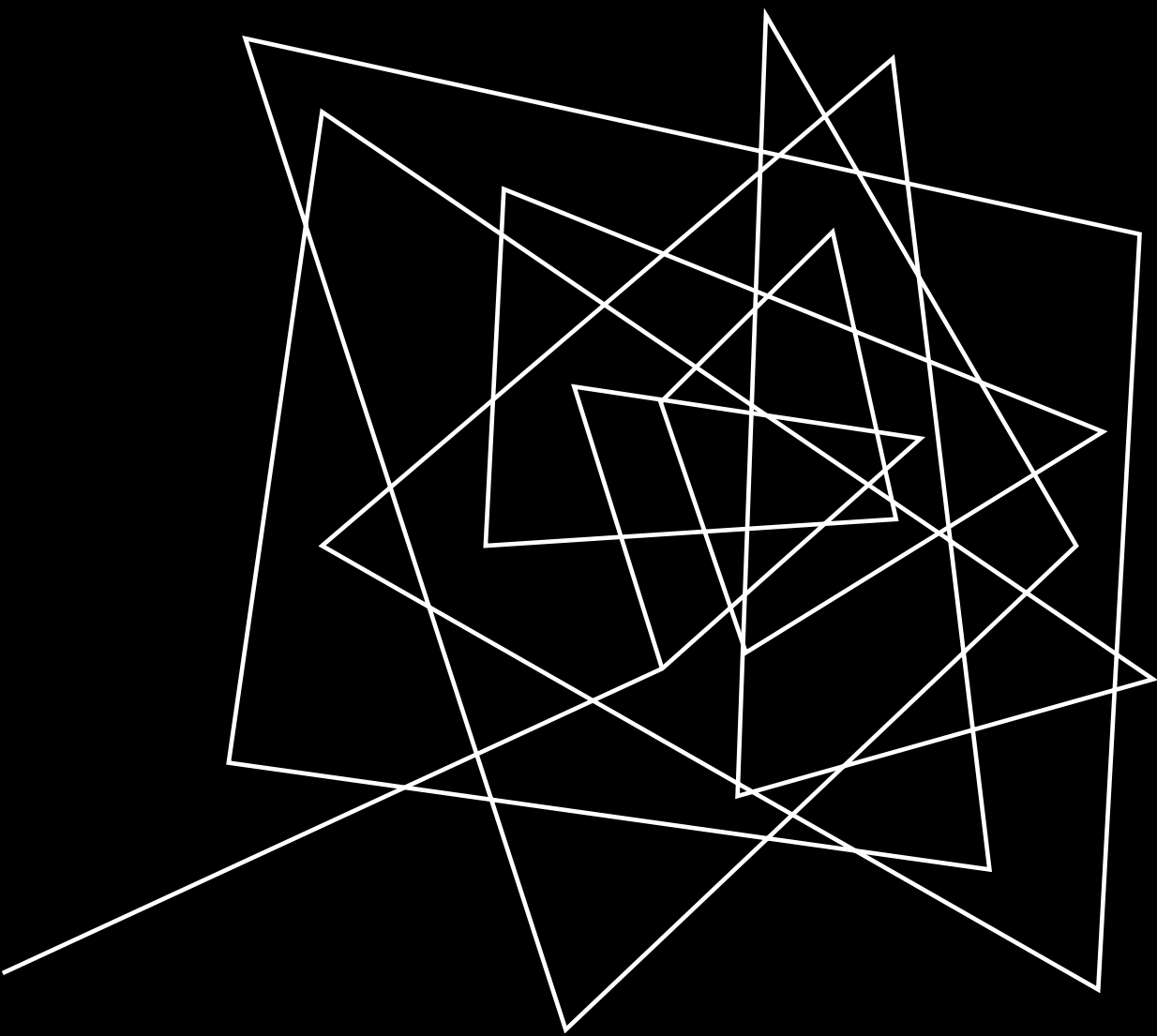
Revise the article based on feedback from ~2 other editors

COPYEDITING

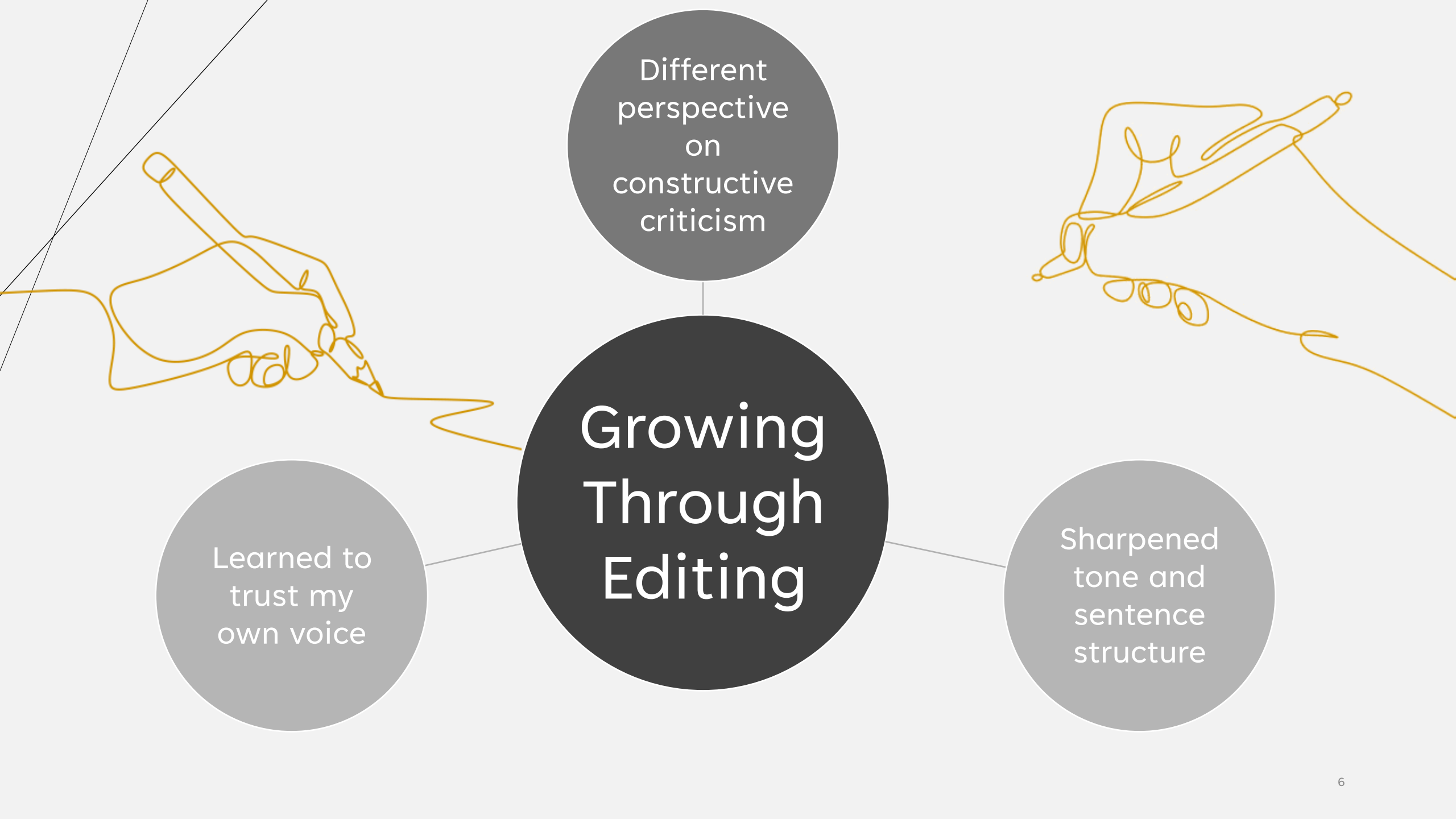
Send to researchers for fact-checking and to copyeditors for final revisions (may need to edit again)

PUBLISHED

Enjoy the satisfaction of being published!



EDITING: THE BEST TEACHER

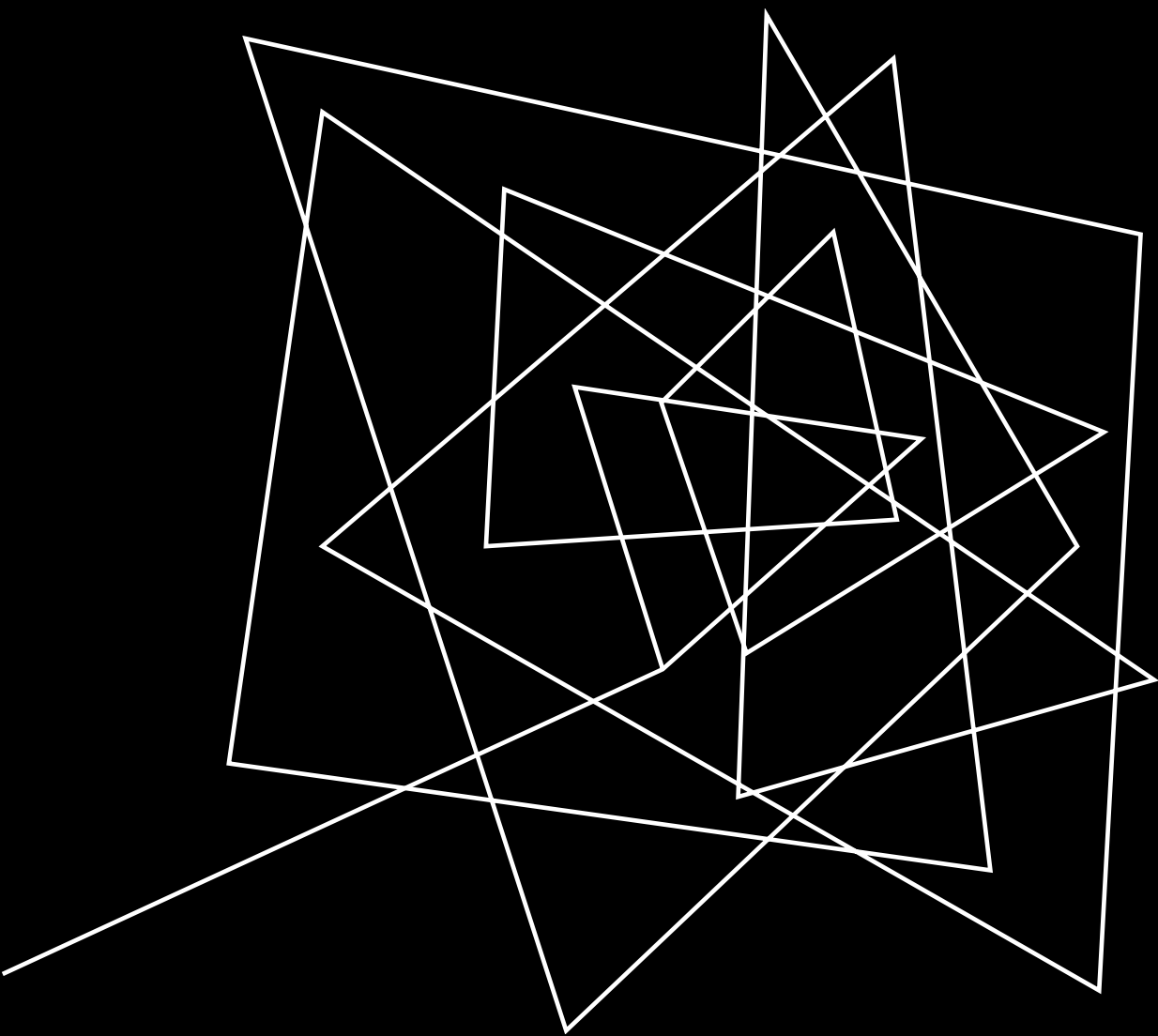


Growing Through Editing

Different perspective on constructive criticism

Learned to trust my own voice

Sharpened tone and sentence structure



THE RESULTS

Peculiar comet confirms existence of water ice in the asteroid belt **FREE**

7 July 2023

New measurements of the chemical makeup of asteroids and comets are blurring the line between the two classes of solar-system objects.

[Hannah H. Means](#)

DOI: <https://doi.org/10.1063/PT.6.1.20230707a>

High schoolers compete in 53rd International Physics Olympiad in Japan **FREE**

27 July 2023

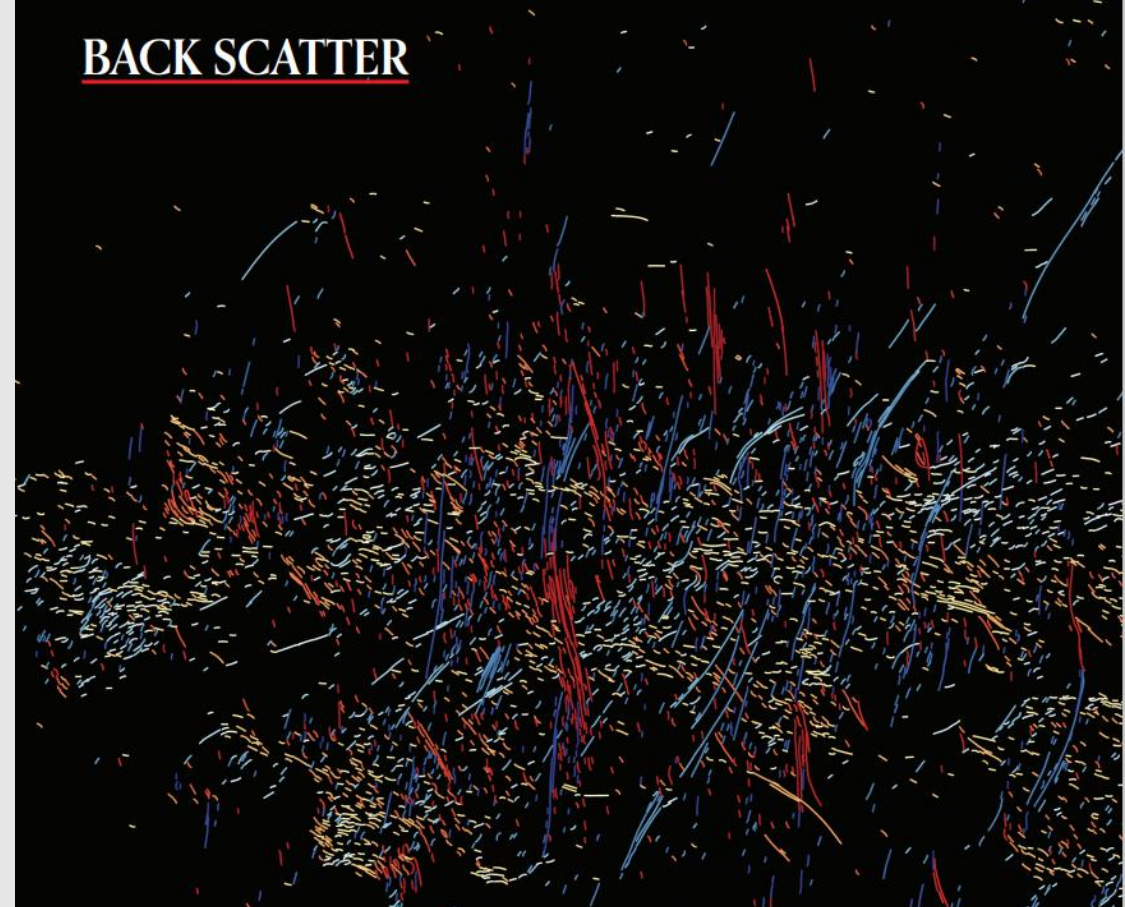
Participants meet face-to-face for the first time since 2019 for a week of physics and fun.

[Hannah H. Means](#)

DOI: <https://doi.org/10.1063/PT.6.4.20230727a>

**One more on the way
(online and in print)**

BACK SCATTER



Mysterious Milky Way filaments

Around 25 000 light-years away, high-energy particles are moving near the speed of light in large vertical magnetized threads perpendicular to the plane of the Milky Way. The particles are likely still zipping around inside them today. Northwestern University's Farhad Yusef-Zadeh and his colleagues first discovered the filament-like structures near Sagittarius A* (Sgr A*), the black hole at the center of our galaxy, almost 40 years ago. As of 2022, about 1000 filaments stretching roughly 150 light-years have been counted. Now, through a MeerKAT radio telescope survey of the galactic center, Yusef-Zadeh and other researchers have found, to their surprise, what they suspect to be a few hundred horizontal filaments 5–10 light-years in length that are pointing radially toward Sgr A* and parallel to the galactic plane.

To make this image, Yusef-Zadeh and his colleagues filtered the original

MeerKAT image to smooth the background noise, and then they applied an algorithm technique to identify and quantify every filament, each of which is represented by a dash. The filaments here span a $3.5^\circ \times 2.5^\circ$ field of view and display a colorful glimpse of only the inner few hundred parsecs of the Milky Way. The redder a filament is, the closer it points to the galactic north, whereas the bluer filaments point farther away. Yusef-Zadeh and his colleagues say that the vertical filaments do not have a clear energy source, but they suspect that the horizontal ones stem from jet-driven outflow from Sgr A*. Although they have no clear answers as to what the purpose of both filament types are, the scientists say that the horizontal filaments help further the understanding of Sgr A* and its accretion disk orientation. (Yusef-Zadeh et al., *Astrophys. J. Lett.* **949**, L31, 2023; image courtesy of Farhad Yusef-Zadeh.)

—HM

TO SUBMIT CANDIDATE IMAGES FOR **BACK SCATTER** VISIT <https://contact.physicstoday.org>.

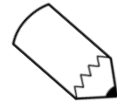


“OUR JOB IS NOT TO WRITE,
IT IS TO BE READ”

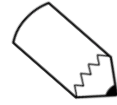
- Richard Fitzgerald (Editor-in-chief of PT)



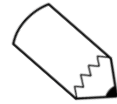
PHYSICS
TODAY



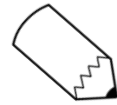
Andrew Grant and Toni Feder
Mentors



Alex Lopatka
Back Scatter



Richard Fitzgerald and the whole PT staff
Listening, Answering, Editing



Brad Conrad, Mikayla Cleaver, Kayla Stephens
Program Coordinators

THANK YOU!

Peculiar comet
confirms existence
of water ice in the
asteroid belt



Mysterious Milky
Way filaments

High schoolers
compete in 53rd
International
Physics Olympiad
in Japan



HANNAH MEANS

Email

hannahhmeans@gmail.com
hmeans@bgsu.edu

LinkedIn

[linkedin.com/in/hannahmeans](https://www.linkedin.com/in/hannahmeans)