

WebSights features announcements and reviews of select sites of interest to physics teachers. All sites are copyrighted by their authors. This column is available as a web page at [PhysicsEd.BuffaloState.Edu/pubs/WebSights/](https://PhysicsEd.BuffaloState.Edu/pubs/WebSights/). If you have successfully used a physics website that you feel is outstanding and appropriate for WebSights, please email me the URL and describe how you use it to teach or learn physics—[macisadl@buffalostate.edu](mailto:macisadl@buffalostate.edu).

• **Computational Physics Modelers (including climate modelers) win 2021 Nobel Prize in Physics**

[aip.org/science-news/nobel2021](https://aip.org/science-news/nobel2021)  
[physicstoday.scitation.org/doi/10.1063/PT.6.1.20211005a/full](https://physicstoday.scitation.org/doi/10.1063/PT.6.1.20211005a/full)  
[nobelprize.org/prizes/physics/](https://nobelprize.org/prizes/physics/)  
[en.wikipedia.org/wiki/Alfred\\_Nobel](https://en.wikipedia.org/wiki/Alfred_Nobel)

Professors Syukuro Manabe, Klaus Hasselmann, and Giorgio Parisi will share the 2021 Nobel Prize in Physics for their work on the stochastic computer modeling of complex systems—Manabe and Hasselmann in particular for weather and climate modeling, and Parisi for the spin-glass problem (which in turn extends to many other problems and scales). Their work includes modeling of human-caused warming interactions on global temperature and climate.

The Nobel Prizes always generate hopeful, positive interest in physics in my students and the general public. Climate change in particular is one of the great challenges and interests of our day. My students are entertained with the STEM culture story of Alfred Nobel's premature obituary influencing the subsequent establishment of the prize—"Merchant of Death" makes good, indeed.

• **STEM teacher recruitment group "Get The Facts Out"**

[getthefactsout.org/](https://getthefactsout.org/)  
[tinyurl.com/W5-honorTeachers](https://tinyurl.com/W5-honorTeachers)

If our students are to cope with climate change and the many scientific literacy demands of the future, they will need good teachers. The GFO community has been very active organizing and hosting conferences, researching and developing user-tested outreach materials in editable formats for localizable recruitment posters, brochures, videos and many other resources. In particular they are good at promoting the STEM teaching professions (OUR profession) as rewarding, desirable, and financially viable careers with strong quality of life. You should be showing their wares in your classroom to inspire your students.

On a related note, amongst other new teacher professional resources the AIP has published a new book *Honoring*

*Teachers As Professionals: Stories and Pathways for Growth in Your Classroom and Career*. Kudos to authors Alisa Grimes, Nicole Schrode, Rebecca Stober, and Shannon Wachowski, and the first chapter is freely readable online.

• **Effective Practices for Physics Programs: Improving your physics department**

<https://ep3guide.org/>

This is a website "...supporting undergraduate physics programs with collections of knowledge, experience and proven good practice for responding to challenges and engaging in systematic improvement." Led by the APS and AAPT, the guide supports effective departmental change by *being intentional* including recruitment and retention of undergraduate physics majors, advising and mentoring students, career preparation, undergraduate research, introductory, upper division and computational courses, teacher preparation, strategic planning, chairing, reviewing, maintaining culture and climate, dealing with external threats, etc. Certainly these are all issues in my department.

• **Brad Moser's "Physics Alive!" 30th Podcast features Carl Wieman on teaching expertise**

<http://physicsalive.com/carl/>

Moser's recent hour-long podcast features Nobel Laureate Wieman's findings in his scientific study of thinking and learning applied to teacher decision-making. The podcast episode webpage is a treasure trove of teaching ideas and resources, including links to three papers Wieman has written or influenced: "Improved Learning in a Large-Enrollment Physics Class," "Transforming a fourth year modern optics course using a deliberate practice framework" and "Active learning in a graduate quantum field theory course." The episode webpage links to other workshops, books and websites. It also contains a rich collection of quotes from the episode, of which my favorite compares physics and STEM faculty training to prescientific medical education, and lecturing to medieval bloodletting. And the episode takes some really hard close looks at the intro physics laboratory experience.