

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/. 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.

•The American Modeling Teachers Association website:

<http://modelinginstruction.org>
<http://fnoschese.wordpress.com/>

<http://kellyoshea.wordpress.com/author/kellyoshea/>

The nonprofit AMTA website contains resources that are both freely available and others that require membership in the AMTA (\$60/year or a lifetime membership that's a steal at \$250). The AMTA website open section includes some college and HS physics curriculum materials, while the members section contains extensive research-informed and proven curricular activities from the well-respected ASU Modeling Physics curriculum. Also listed are a collection of free blogs by dedicated physics educators that are well-worth perusing for inspiration (my favorites are Action-Reaction and Physics!Blog! respectively by Frank Nochese and Kelly O'Shea). Whether you are interested in challenging yourself and your students with some new activities, or you are an experienced modeler looking to see what the latest curricular revisions look like, a visit to both the AMTA site and the blogs are well worthwhile.

•What does sound look like? by Adam Cole of National Public Radio

<http://www.npr.org/2014/04/09/300563606/what-does-sound-look-like> (video, article and references)

<https://www.youtube.com/watch?v=px3oVGXr4mo> (YouTube copy of Video Only)

<http://infohost.nmt.edu/~mjh/Res-Optical.html>

The advent of sensitive high-speed cameras combined with Schlieren optical apparatus allow the video observation of high-speed refractive index (density) changes in air. Hence sound waves can be imaged during slow motion playback. This remarkable video would be of particular interest to instructors teaching waves and/or acoustics. Many of the images are from Michael Hargather's Shock and Gas Dynamics Laboratory at New Mexico Tech.

NPR article submitted to OPHUN-L physics list by Mike Balzer of Mynderse Academy Physics, Seneca Falls NY

•A Nobel winning theoretical physicist's collection of websites: How to become a GOOD Theoretical Physicist by Gerard 't Hooft

<http://www.staff.science.uu.nl/~Gadda001/goodtheorist/index.html>

<http://www.phys-l.org/cgi-bin/namazugi.cgi?query=good+theoretical+physicist>

<http://www.feynmanlectures.info>

This collection of about 70 URLs (of unusual terroir) was drawn to my attention by a colleague's post to the PHYS-L listserv. Professor 't Hooft's website is dedicated to those who choose "...to study theoretical physics in their own time," and includes preparatory topics (primary mathematics, electronics) as well as works of his own (Quantum Field Theory, Lie groups in Physics). While often disagreeing, I quite enjoyed 't Hooft's strong opinions and colorful language—his list is "set up only for ... the very best ... who are determined to earn their own Nobel Prize" and eschews school science as full of "childish anecdotes." An extensive discussion on the PHYS-L listserv followed. I did submit the URL for the Feynman lectures to the keeper of the [goodtheorist](http://www.feynmanlectures.info) website.

Submitted to the PHYS-L listserv by Antti Savinainen of University of Jyväskylä Physics

•Lightning videos and pictures; other static electric dangers

bbc.in/1cxKrYa

<http://io9.com/this-is-why-you-dont-hide-under-a-tree-during-a-lightni-1587652722>

<http://www.pei.org/PublicationsResources/SafetyResources/StopStaticCampaign.aspx>

My electricity and magnetism students always ask about lightning, and recently I was directed to two (new to me) sites with good videos and photos: First a remarkable pair of skin photos from a BBC article on the survivor of a lightning strike. Then an io9 science video showing a lightning strike on a tree taken via security camera. Finally, my favorite electrophorus-related footage: Petroleum Equipment Institute video of a vehicle fueling fire caused by static discharge. All guaranteed to incite student discourse.

•New video from Tim Blais of A Capella Science: Eminemium – Choose yourself

https://www.youtube.com/watch?v=H_wYX96L4Vo

Finally, the composer of "Bohemian Gravity" has a new video out: A nuclear physics ethic rap. Offbeat physics culture, yo!