

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.

• **AMTA offers distance learning Modeling E&M workshop**

www.ewebliife.com/prm/AMTA/calendar/event?event=1431
modelinginstruction.org

In what surely is a sign of professional development to come, the American Modeling Physics Teachers Association is offering their first ever synchronous online Modeling E&M Workshop for teachers who have already taken the traditional face-to-face Modeling Mechanics Workshop. Graduate credit is available, and the course runs February through May 2016. Best regards on this signature undertaking and achievement.

• **New NAP releases: Einstein & 100 years of special relativity, women in science, and out of school science**

tinyurl.com/WR-SR100

www.nap.edu/catalog/11572/womens-adventures-in-science-10-book-set

www.nap.edu/catalog/21740/identifying-and-supporting-productive-stem-programs-in-out-of-school-settings

The National Academies Press has released a series of works (most freely downloadable or free on a time-limited basis) partially celebrating Einstein and his 100 years of special relativity, including: “Einstein Defiant: Genius vs Genius in the Quantum Revolution,” “Einstein’s Unfinished Symphony: Listening to the Sounds of Spacetime,” and “NASA’s Beyond Einstein Program: An Architecture for Implementation.”

Of greater middle and high school classroom utility, NAP has also released the “Women’s Adventures in Science” series of ten books for about \$150 (NOT freely downloadable; time to harass the school librarian).

And back in the NAP freely downloadable vein, I have been interested in the “Identifying and Supporting Productive STEM Programs in Out-of-School Settings” report and related works, as we are working with afterschool programs and local science museums to better support my regional STEM Learning Ecosystem. If you’re reading this column, welcome to the ecosystem, and prepare to hear the phrase more often.

• **STEAM It Up with the 8 C’s**

teacherrebootcamp.com/2015/10/20/steam7cs/

emojiscience.com/

6secondscience.tumblr.com/

An interesting K-12 collection of mainly technology-based STEAM (STEM + Arts) resources at edublogs has been forwarded to me by multiple middle school teachers. This includes the (?) “Periodic Table of QR Codes” linking to videos, comic books, code.com links, tools for infographics and data visualization / presentation, concept mapping, etc. GE’s “emojiscience” and “6 second science fair” seem nicely overwhelmingly intense presentations of STEM investigations and activities for the middle school community.

• **Fraknoi’s Tools for Astronomy Educators and Martian movie critique**

www.youtube.com/svastronomylectures

www.astrosociety.org/wp-content/uploads/2015/10/Mars.pdf

www.researchgate.net/publication/282505754_Mars_Science_Fiction_with_Reasonable_Science

aas.org/outreach/moose-menu-outreach-opportunities-science-education

Astronomy lecture videos, a real number discussion of Martian dust storms (a 1% atmosphere topping out at 60 mph seems pretty nonthreatening), a guide to “hard SF” about Mars, and the new guide for AAS Astronomy Ambassadors rejoicing in the acronym MOOSE: Menu of Outreach Opportunities for Science Education have all been recently promulgated by Andrew Fraknoi, past director of the ASP and one-man astronomy promotion machine.

• **Acoustic levitation and ultrasonic tweezers: liquid droplets (Clemson), polystyrene (Argonne, Sao Paulo), etc.**

edm.com/articles/2015-10-09/liquid-droplet-levitated-by-sound

tinyurl.com/WS-SED138

www.livescience.com/40912-acoustic-waves-defy-gravity-video.html

www.aip.org/publishing/journal-highlights/acoustic-levitation-made-simple

The Clemson video is quite compelling in a glycol / water droplet-levitating-Chladni-plate fashion. Smarter Every Day #134 does a nice everyman’s description. Google the phrase ‘acoustic levitation’ for too many entrancing videos.