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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.*

• *New Free Online Journal of Astronomy and Earth Sciences Education,* jaese.org

The editor and editorial board are pleased to announce the publication of a new online journal for research papers on space science and Earth science education. Entitled *The Journal of Astronomy and Earth Sciences Education* (JAESE), the new peer-reviewed publication is open-access, meaning it is free to all readers. The first issue is already complete (see www.jaese.org), and papers are now being accepted for the second issue. The journal fills a void created when the American Astronomical Society stopped publishing its online journal, Astronomy Education Review, in 2013.

Detailed author guidelines are available at the journal website, and questions may be directed to the editor, Dr. Tim Slater. The journal publishes refereed research papers on teaching and learning across a broad range of geosciences disciplines including: astronomy, agriculture, climate science, geology, geography, energy resource science, environmental science, meteorology, planetary sciences, and oceanography. JAESE also considers essays on innovative teaching strategies and successful public outreach programs.

Submitted by A Fraknoi, Chair Astronomy Foothill College

• *Polyphonic Overtone Singing - Explained Visually*

tinyurl.com/WS-Overtone2

The original YouTube overtone singing video published here in Dec. 2014 has been re-edited into a multiply [multiple?]-split screen format that includes a piano keyboard, a graphic spectrum analysis (frequencies versus time), and Anna-Maria Hefele's singing with even more detailed overdubbed explanation. A lot of fun for physics of sound students and their profs. Bravo!

• *Crystal (Xal) Radios for Learning Physics*

sci-toys.com/scitoys/scitoys/radio/ten_minute_radio.html
people.ccmr.cornell.edu/~kip/10_02_12_cub_scouts_radio_project.pdf
phet.colorado.edu/en/simulation/radio-waves
youtube.com/user/RimstarOrg/
tinyurl.com/WS-rEdfXalCBradio
radio-locator.com/
tinyurl.com/WS-PNgranada

I have been working on what has proven to be very popular physics professional development with the NY Master Teachers program, and we have been having a blast building crystal radios. We used the sci-toys designs extensively and purchased their materials for manufacturing almost 100 radios—Ge diodes, varicaps, piezoelectric earphones, ferrite loop coils, etc. and we also purchased their supplies for transistor radios and simple AM transmitters—the latter are both fun and useful for troubleshooting newly manufactured Xal radios. There are also many excellent YouTube videos for Xal radios, particularly those from Rimstar.org's channel. An oddly amusing crystal radio is rEdf196's CB crystal radio using an electric guitar amplifier instead of headphones. And we have been picking up a nearby powerful FM station (WBUF) through a Ge diode, which is challenging our explanatory abilities. Finally, in the discussion of how detector diodes work, we discovered the wonderful animated video "The PN Junction" from the Universidad de Granada.

• *Teaching High School Physics*

sites.google.com/site/teachinghighschoolphysics/
tinyurl.com/WS-WenningBook

A brand new three-volume Kindle (electronic) book on physics teaching has just been released by the accomplished and well-respected father-daughter author team of Carl Wenning and Rebecca Vieyra. The work is intended for preparing physics teachers and as a detailed reference for in-service physics teachers, emphasizing pedagogical content knowledge in physics education. The work includes specific guidelines for physics teacher education, summarizes research associated with physics teaching and learning, and includes a myriad of effective instructional strategies in high school physics.

Submitted by Carl Wenning

• *Summer Professional Development for Physics teachers*

phystec.org/pd/
modelinginstruction.org/workshops-2015/
aapt.org/Conferences/sm2015/

As is traditional every May issue, I remind readers there are many physics teaching professional development opportunities and research experience for teachers (RET) opportunities, kindly collected at the Phystec website clearinghouse. In particular this summer there will be over 50 Modeling Physics (and related) courses offered in at least 22 states (see the excellent modelinginstruction.org website). Also consider attending the late July AAPT National Meeting in College Park, MD, and the Physics Education Research Conference (PERC) immediately following it. Have a great summer.