

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/](http://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).

### **Two sites on practical room acoustics: “Ringing Out your Room” and “10 Minutes Toward Better Sound”**

[tinyurl.com/WS-RingRoom](http://tinyurl.com/WS-RingRoom)  
[tinyurl.com/WS-10minSound](http://tinyurl.com/WS-10minSound)

A colleague of mine is currently teaching a physics of sound for non-majors course and is working on resources for simple room acoustics. The first video is Jeff Merkel’s 68-minute long “Ringing Out your Room.” Jeff talks about a variety of room acoustics measurements (software, hardware, and techniques) to a “general” audience (audiophile types with little physics training, perhaps), and his talk has multiple layers and includes useful insights for a variety of audiences. The talk includes one demo segment where Jeff sets up standing waves in the room and has participants move about to hear the pressure nodes and antinodes. At the time, Jeff taught at UC-Denver in both physics and recording arts and ran at least two businesses (a loudspeaker maker and a studio).

John Calder’s series of three short videos total 10 minutes and discuss simple techniques for treating rooms with simple diffusers and absorbers, phase coherent curved diffusers, identifying and treating first reflection points, corners, and flutter echo.

*Submitted by David Abbott of Buffalo State Physics*

### **“The Martian”: A science movie review How accurate and enjoyable is a new movie about a NASA astronaut stranded on Mars?**

[scitation.aip.org/content/aip/magazine/physicstoday/news/10.1063/PT.5.9047](http://scitation.aip.org/content/aip/magazine/physicstoday/news/10.1063/PT.5.9047)  
[en.wikipedia.org/wiki/The\\_Martian\\_\(film\)](http://en.wikipedia.org/wiki/The_Martian_(film))

This review from the Oct. 15th print issue of AIP’s *Physics Today* (distributed to all AAPT members) discusses the errors and accuracies of Andy Weir’s originally self-published Amazon book translated to the big screen by 20th Century Fox and director Ridley Scott. I have read but not yet seen the (very popular and very profitable) “The Martian” movie, but plan to. The book was a delight.

*Submitted to Phys-L by Antti Savinainen, PhD*

### **2015 Nobel Prize in Physics awarded to T. Kajita and A. McDonald for Neutrino Oscillations**

[www.nobelprize.org/nobel\\_prizes/physics/laureates/2015/press.pdf](http://www.nobelprize.org/nobel_prizes/physics/laureates/2015/press.pdf)  
[www.nytimes.com/2015/10/07/science/nobel-prize-physics-takaaki-kajita-arthur-b-mcdonald.html](http://www.nytimes.com/2015/10/07/science/nobel-prize-physics-takaaki-kajita-arthur-b-mcdonald.html)  
[www.perimeterinstitute.ca/node/97220](http://www.perimeterinstitute.ca/node/97220)  
[www.aapt.org/Resources/Neutrinos-Articles-for-Physics-Educators.cfm](http://www.aapt.org/Resources/Neutrinos-Articles-for-Physics-Educators.cfm)  
[iopscience.iop.org/page/nobel-prize-2015](http://iopscience.iop.org/page/nobel-prize-2015)

A number of physics organizations have placed materials associated with neutrino oscillations for students, laymen, and professional physicists online, including the Nobel Organization, the *NY Times*, the Perimeter Institute, the AAPT, and the IoP. Congrats to the new laureates and good luck communicating their ideas in your classrooms (the resources will help considerably).

### **Harvard Project Physics Materials all freely available online**

[en.wikipedia.org/wiki/Harvard\\_Project\\_Physics\\_archive.org/details/projectphysicscollection\\_archive.org/details/projectphysicscollection&tab=about](http://en.wikipedia.org/wiki/Harvard_Project_Physics_archive.org/details/projectphysicscollection_archive.org/details/projectphysicscollection&tab=about)

The 1962-1972 Harvard Project Physics HS collection of texts and handbooks, readers, transparencies, programmed instruction, and test booklets are all now available from an Internet archive.org collection curated by an original member of the Harvard project leadership, F. James Rutherford, who worked with Gerald Holton and Fletcher Watson. This curriculum was widely used in the 1970s and ‘80s. The curriculum divided physics into six main areas: Concepts of Motion, Motion in the Heavens, The Triumph of Mechanics, Light and Electromagnetism, Models of the Atom, and The Nucleus. The works are available in several formats (pdf, Kindle, etc.). Thank you, Dr. Rutherford.

*Tom Gordon submitted this to the Modeling-L list with the comment, “I think it might be appropriate for someone, at this time, as a reminder, to call attention to, and extol the virtues of, the six volumes of the Harvard Project Physics readers, for background enhancement, anecdotes, and just for the joy of reading all that good stuff!”*