WebSights features reviews of select sites presenting physics teaching strategies, as well as shorter announcements of sites of interest to physics teachers. All sites are copyrighted by their authors. This column is available as a web page at http://PhysicsEd.BuffaloState.Edu/pubs/WebSights. If you have successfully used a site to teach physics that you feel is outstanding and appropriate for WebSights, please email me the URL and describe how you use it to teach. The person submitting the best site monthly will receive a T-shirt.

• The 2007 Nobel Prize for Physics Giant Magnetoresistance Explanations:
awarded to Albert Fert (Université Paris-Sud) and Peter Grünberg (Forschungszentrum Jülich). Read the official Nobel descriptions at introductory (public) and scientific levels of the GMR effect now universally exploited in computer hard drives. The Nobel website is a treasure trove of approachable physics history and content, well-worth suggesting for student projects.

Submitted to PHYS-L by Bob Sciamanda;
trebor@winbeam.com
DOI: 10.1119/1.2809158

• Two New Free-Access Peer-Reviewed Professional Physics Research Journals: PhysMath Physics A and B:
http://www.physmathcentral.com/ These journals charge the scientists publishing the manuscripts. The journals may be of interest to advanced students, or those wishing to see how physics research is published. For example, new work on dark matter is seen at http://www.physmathcentral.com/pmphyss.

Submitted by Chris Leonard of PMC <chris.leonard@physmathcentral.com
DOI: 10.1119/1.2809159

• More Web Videos for Teaching Physics:
Ralph McGrew of Broome Community College Physics writes that he uses very short video clips from “America’s Funniest Home Videos” to teach physics from http://abc.go.com/primetime/afv/index, Here are his 10 suggested clips, roughly in the order in which they might be used in a physics course:
–Newton’s first law: In Bike ramp crash, under Mishaps, gallery 1, a cyclist continues moving straight ahead at constant speed after his bicycle suddenly stops.
–Newton’s first and second laws: In Bulldog slides, under Top rated, gallery 24, an animal has difficulty leaving a frozen pond.
–Newton’s second law: Dog plane float, under Pets and animals, gallery 1, shows an unconstrained, imperturbable dog in free fall in the cockpit of a light airplane.
–Circular motion: In Dog drags baby, under Babies, gallery 1, a tenacious dog causes the centripetal acceleration of a baby revolving in a walker. This situation contrasts nicely with Dog pulls toy car, under Pets and animals, gallery 8, in which the animal causes changes in speed as well as direction.
–Newton’s third law: In Crib blanket teamwork, under Kids, gallery 5, each child pulling on a blanket moves himself as well as the other child. In Dorm chair hit, under Teens, gallery 1, a girl safely jumps straight up from a wheeled chair, but sends it backward at high speed when she jumps upward and forward.
–Center of mass: In Dump truck tips, under Mishaps, gallery 1, an unloading truck tips backward.
–A metastable system: Egg explodes, under Kids, gallery 3, features an egg warmed in its shell in a microwave oven.
–Static electricity: Charged with a blanket, the Static electricity dog, under Pets and animals, gallery 4, has its long hair reveal its radial electric field.
McGrew adds, “These amusing and interesting videos are more surprising to students than to physics teachers. Those listed above are between 12 s and 45 s duration. It is easy to show a video more than once. Students think of the phenomena as ‘real-word’ or everyday-life applications. They confirm that living creatures are described by the same mechanical laws as blocks and rocks. Students may themselves show the clips to others and explain them.”

This editor has also been watching physics videos extracted from Japanese popular TV shows (!) on Google and Yahoo, particularly the water bottle rocket jetpack at http://video.google.com/videoplay?docid=-6943201001782160188 and the vector baseball pitching machine at http://www.youtube.com/watch?v=yPHoUbCNPX8. Both have been reported widely, e.g. on PHYS-L. http://PhysicsEd.BuffaloState.edu/PHYS-L. Submitted by Ralph McGrew <mcgrew_r@sunybroome.edu>
and the Editor.
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