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Recent papers in JURP (Journal of Undergraduate Research in Physics), published online by SPS, range from astrophysics to table-top mechanics. Topics include dark matter in the universe, the physics of tipping a kayak, and the interactions of photons with the DNA base adenine. We invite you to join the conversation at <http://www.jurp.org>. Here is a sample of two papers:

From Southern Methodist University, E. Fagg, J. Park, K. Pearson, and R. Kehoe describe a systematic search for variable

stars in "General Search for Stars with Rapid Optical Variations". Using archival data from the ROTSE1 telephoto array, the authors develop some search techniques and use statistical methods to find 42 variable stars, 17 of which were not found in catalogs of previously acknowledged variables.

Closer to the ground, J. Cady and C. Middleton of Mesa State College analyze the physics of a race between spheres on curved tracks of different shapes. Using Newtonian mechanics the authors derive an expression for the time difference between tracks of two

specific shapes, making a definite prediction of which route will result in winning the race. They compare their prediction to data taken from real tracks. The paper is called "The High Road/Low Road Demonstration, or Birds on a Wire".

We invite your papers on research in physics that you performed as an undergraduate. Send them to the Journal of Undergraduate Research in Physics, c/o Dwight E. Neuenschwander, Editor, dneuensc@snu.edu.