SUMMER Research Opportunity in Solar Astrophysics

Important information meeting 11:00 Monday 9 March 2009

Solar astrophysics is becoming even more exciting with the advent of new solar observing satellites, and with increasing solar magnetic activity (“solar max”). Our new research project with Lockheed Martin Solar and Astrophysics Laboratory (LMSAL) in Palo Alto, CA, is just down the road from Stanford. Evergreen summer research students would probably be housed with students at Stanford Solar Center, where you could take advantage of recreational and educational opportunities organized for their REU students (such as lecture series, BBQs, and hikes).

These are typically lively, fun summers full of learning (and significant research work). Summer research students typically spend 8-10 weeks in the research internship, and end up co-authoring a paper, then later attending a professional conference to present their work (usually a poster).

The 2 or more Evergreen students chosen for this project will receive funding of expenses (including transportation and housing) and either a stipend or credits (your choice). Students with calculus-based physics and/or Unix-based computer experience are preferred.

The lead investigator, Neal Hurlburt, is an Evergreen alum and senior scientist at LMSAL. He has plenty of data to be analyzed, and Lockheed’s new satellite-based solar observatory, SDO, is scheduled for launch in August 2009. Dr. Hurlburt wants to help TESC students design a game that others can play (e.g. online), to analyze more solar data. LMSAL has designed similar training and data analysis games, as have TESC students in Judy Cushing’s SOS programs. (See Heliophysics Knowledge Base to facilitate scientific discovery  http://www.lmsal.com/~aki/SunWind.jnlp)

Dr. Hurlburt will visit Evergreen to discuss this project on Monday 9 March 2009 at 11:00 in Sem 2 A3109. All interested students are invited to attend, and to stay afterwards. Bring your lunch and your questions.

Dr. Hurlburt will be the lead scientist responsible for student training on this project. Dr. E.J. Zita will mentor Evergreen students’ work before, during, and after the internship. Questions? email zita(at)evergreen.edu