003.24

Latin America's Presentation of ″World Year of Physics 2005″

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I attended the Inter-American Physics Educators Conference in Costa Rica in July 2006. Several Latin countries gave presentations on how they celebrated the 2005 Worl Year of Physics. They were very inventive in involving the general public. I believe that raising the general publics interest and understanding of physics is cruicial, so I was very impressed with their efforts. I would like to share the creative method's used by these countries at the AAPT meeting.

003.25

A Masterclass in Particle Physics for High School Students

Kenneth Cecire[1], T. Entwistle[2]
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The European Particle Physics Outreach Group (EPPOG) developed the Masterclass in 2004 to bring particle physics to high school classrooms in Europe. They put real data on a website (http://wyp.teilchenphysik.org/mc.htm) from the Large Electron-Positron (LEP) collider at CERN. Students analyze this data and draw conclusions at their schools. They then compare their results with those found at other schools in Masterclass live video conferences hosted by CERN over the internet.

In March 2004, six students at Ward Melville High School on Long Island were sponsored by QuarkNet and Brookhaven National Laboratory to become the first U.S. team to participate in the EPPOG Masterclass. The Ward Melville group was positive about the experience and their results tracked well with those of their colleagues in the video conference from high schools in Greece, Slovakia, and Poland.

003.26

Physics Education in Nigeria

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[1]*ABTI-American University of Nigeria, Nigeria.*

For the last year and half I have been teaching at ABTI-American University of Nigeria (AAUN) in Yola, Nigeria (a small rural town in eastern Nigeria). One of the primary goals of AAUN is to offer American-style higher education in West Africa. Before coming to AAUN, I taught beginning physics using lecture/discussion and Real-Time Physics laboratories in the USA for ten years. I will discuss the differences and difficulties I have found in trying to use these teaching methods with West African students.

003.27

Physics Education in Russia and in the United States

Irina Struganova[1]
[1]*Barry University.*

Being a graduate of one of Russia's high schools and then of the Department of Physics at Moscow State University and teaching General College Physics in the United States for ten years, I would like to share my opinion about some aspects of physics education in these two countries. Both systems have their positive and negative features and the best combination could be achieved by exercising different methods and pedagogies taken from the two traditional systems of education.

003.28

The Comparison Between Russian High School And American College Curricula

Valentin Voroshilov[1]
[1]*Boston University.*

For nine years before moving in the U.S.A. I had been teaching Physics to high school and college students. Now I teach Physics (and Mathematics as well) at a two year college. The comparison between Russian high school Physics curriculum and American college curriculum shows that Russian high school graduates are suppose to demonstrate the similar amount of knowledge as American two year college students when finishing Physics class.

003.29

Representations of Force and Motion Concepts at the Middle Level

Thomas J. Regan[1], B. Sweeney[1], T. Willard[1], G. DeBoer[1]
[1]*AAAS/Project 2061.*

Project 2061 is creating assessment items targeting the learning goals recommended by AAAS*s Benchmarks for Science Literacy (1993) and the NRC*s National Science Education Standards (1996). One of our topics is force and motion at the middle grades level. To reduce the dependence of student performance on verbal ability, we employ graphical representations of concepts and situations. We will describe representations of (1) position versus time (Oil Drop), (2) force, speed, and change of speed (block and line arrows), (3) speed versus time (speed table). We will present sample assessment items and preliminary results from pilot testing and student interviews on comprehensibility, grade-level suitability, and effectiveness relative to purely verbal representations.

004: A Potpourri of Internal Properties of Galaxies AAS Poster, Sunday, 9:20am-6:30pm, Exhibit Hall 4

004.01

A Deep HST Survey of the Prototypical Spiral Galaxy M81

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We present a deep HST survey of the nearby spiral galaxy M81 with the HST Advanced Camera for Surveys. The survey consists of ″B″ and ″V″ observations of 29 ACS fields, totalling to 38 orbits. These observations, together with archival ″I-band″ ACS data, will provide complete, deep coverage of the D25 area of the galaxy in all three filters. The observations are designed to reach a detection limit of 26-27 mag in B and V bands, which probe the bulk of early-type (O,B) stars and the population of star-clusters. The goals of this survey are: (a) to characterize the X-ray source population of M81; (b) to study the stellar populations and star-formation history across the galaxy; and (c) link the X-ray source populations with their parent stellar populations. In this contribution we describe the observations, summarize the data analysis procedures, discuss in detail the goals of the survey and present some results from a pilot study of one field.

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004.02

Panchromatic Tully-Fisher Relations

Martin Meyer[1], SINGS Team
[1]*STScI.*

We present panchromatic Tully-Fisher relations from the Spitzer Infrared Nearby Galaxies Survey (SINGS) and its ancillary data archive. These data span a wide range of optical and infrared wavelengths including B, V, R, I, J, H, K, 3.6 and 4.5 microns. We explore trends in the slope and scatter of the observed relations, and discuss the implications of these on the properties of rotationally supported galaxies. Importantly, we extend the study of