

Pacific Northwest Association for College Physics

Fortieth Conference

Museum of Flight

Seattle, Washington

Applied Physics Outside the Academy

Friday, March 28, 2003

Skyline Room, Museum of Flight

- 8:00-8:30 AM Registration
- 8:30-8:45 AM Contributed Paper
- 8:45-9:45 AM **The Physics of Hydroelectricity Generation**
David Howell and Michael Haynes, Seattle City Light, <mike.haynes@seattle.gov>
- 9:45 AM **Leave for tour of Lighting Design Lab**
- 11:30-1:20 PM Lunch. Meeting of PNACP Directors
- 1:20-2:30 PM **Where Physicists Work in Industry**
Ed Goldin, Director of Career Services, American Institute of Physics,
<egoldin@aip.org>
- 2:30-3:30 PM **The Physics Associated with Cataract
Surgery**
Paul Peter Urone, Physics Department, California State University, Sacramento,
<ppu@csus.edu>
- 3:30-4:00 PM Break
- 4:00-5:00 PM **Crime in the Classroom**
Mary Creason, Physics Department, Duke University, <mary@duke.edu>
- 5:00-6:00 PM **Tour The Museum of Flight**
- 6:00-8:00 PM Banquet, Skyline Room, Museum of Flight
- 7:00-8:00 PM **History of the Museum**
Dennis Parks, Curator, The Museum of Flight, <dparks@museumofflight.org>

Saturday, March 29, 2003
Skyline Room, Museum of Flight

8:30-8:45 AM **Sometimes the More Math We Do, the Less Physics We See**

Jeff Bierman and Eric Kincanon, Physics Department, Gonzaga University,
<bierman@gonzaga.edu>, <kincanon@gonzaga.edu>

8:45-9:00 AM **The Physics of Concert Sound**

Martin Hackworth, Physics Department, Idaho State University,
<hackmart@physics.isu.edu>

9:00-10:00 AM **James Gerhart Lecture: Lissajous and Measuring Standard Pitch**

Steven Turner, Physical Sciences Collection, Smithsonian Institution,
<turners@nmah.si.edu>

10:00-10:15 AM **Physics in the Exploration of Mineral Resources and Oil**

David Terrell, Department of Physical Science, Warner Pacific College,
<Dterrell@warnerpacific.edu>

10:15-10:30 AM **Do we really need General Relativity to account for the total precession of the perihelion of Mercury?**

David McKinstry, Physics Department, Eastern Washington University,
<dmckinstry@mail.ewu.edu>

10:30-11:00 AM Break

11:00-12:00 **An Overview of Boeing Commercial Airplane's Noise Engineering Organization**

Terry Christenson, Interior/Ramp Noise Lead Engineer, Boeing Corporation,
<terry.n.christenson@boeing.com>

12:00-1:30 PM Lunch

1:30-1:45 PM PNACP Business Report and Elections
Steve Hoffmaster, Physics Department, Gonzaga University, <hoffmast@gonzaga.edu>

1:45-2:45 PM **Terahertz Pulse Shaping via Optical Rectification in Poled Ferroelectric Crystals and its Application to Time-domain Molecular Spectroscopy**

Yun Shik Lee, Physics Department, Oregon State University, leeys@physics.orst.edu

2:45-3:00 Contributed Paper