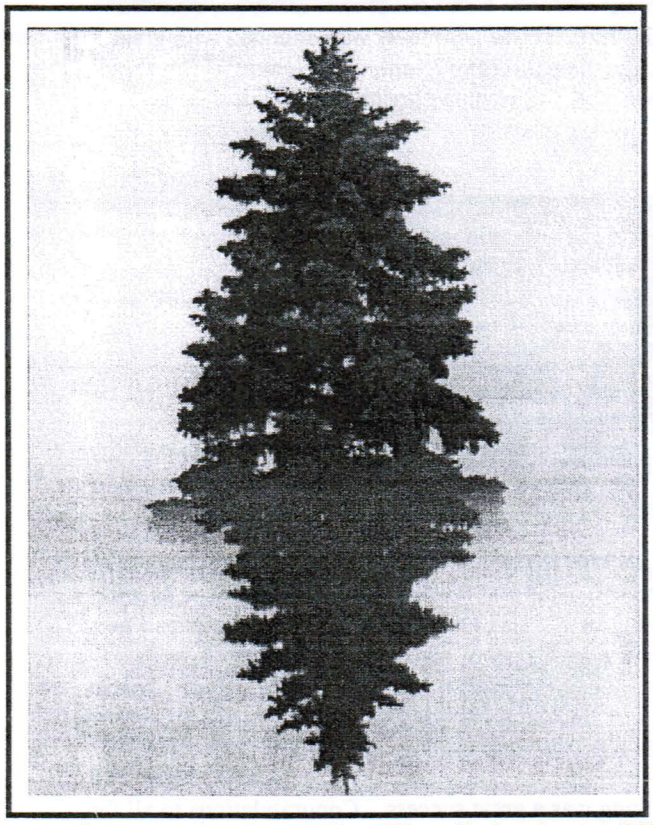
NEWSLETTER

ONTARIO ASSOCIATION OF PHYSICS TEACHERS
(an Affiliate of the American Association of Physics Teachers)
Volume XXII, Number 1 Fall, 2000



Ontario Student Wins First Prize in AAPT Photo Contest!

Stephanie Hill from Port Credit Secondary School, student of Alan Hirsch won first prize in the contrived category in this years AAPT photo contest.

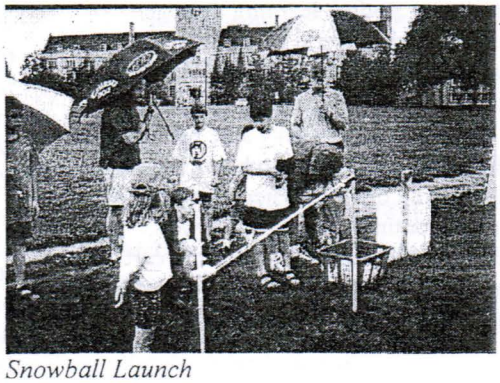
The winning photo was taken with a small plane mirror held perpendicular to the camera lens giving the illusion of the observer looking across a very foggy, still lake at a tree and its reflection in the water.

Vernier Software and Technology kindly awarded a $100 prize and plaque to Stephanie and a $100 credit to Port Credit Secondary School. Congratulations to Stephanie and to Al who designed the project for which the photo was produced.

Report on AAPT Summer Meeting 2000 University of Guelph By Diana Hall

The University of Guelph and the OAPT were hosts to the AAPT annual summer meeting. I hope that several of you were able to take advantage of this unique opportunity to attend this meeting so close to home.

Saturday and Sunday provided a full selection of workshops. I attended the advanced Video Capture session where I continued to practice techniques for analysing motion movies involving panning and zooming. I also learned about new digitizing software available soon through Lenox Softworks, the makers of Videopoint. This program allows you to digitize, edit and then open your movie in Videopoint all with one program... much more convenient and quicker than the old way where you had to digitize with one application, then edit in another and then open the movie in Videopoint. Recently I had been having timing problems which were messing up my data and giving apparently random quantitative results and this new software seems to have solved that problem. (....so far anyway). That's a relief. I'll keep you posted.



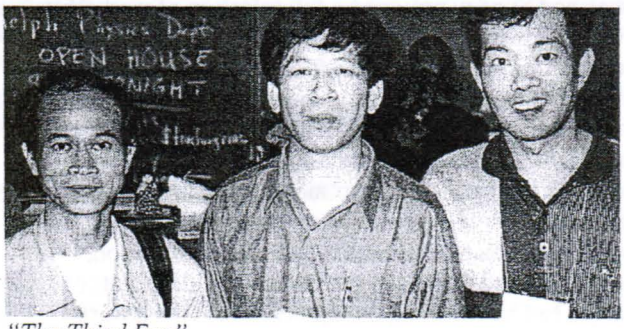
Snowball Launch

The University of Guelph's participation in the Sudbury Neutrino Observatory Project was highlighted during John Simpson's talk on Sunday evening.

Later in the week the theme continued at the SNO Olympics, organized by Glen Wagner and Kevin Soltes. Although the weather was lousy, a group of enthusiastic participants, launched snowballs and built snow towers in the pouring rain.

The Snow Tower

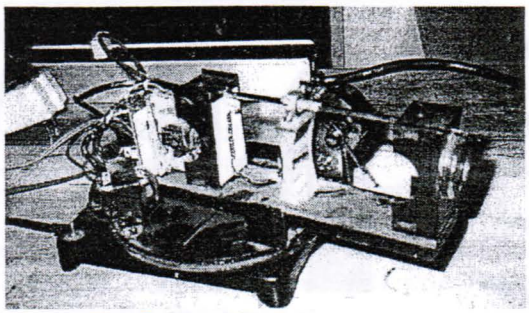
Among other highlights of the week was a very popular demo session presented by a trio from China called "The Third Eye".



"The Third Eye"

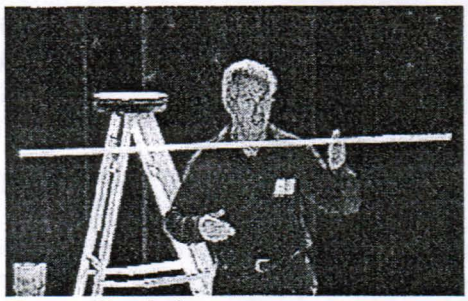
The Third Eye, has several meanings in Chinese culture one which is "Clairvoyant". Xingkai Luo spoke about students ideas about Physics and Physicists and the importance of motivating student learning through demonstrations. He brought several unique and innovative apparatus constructed from basic materials. A very simple example involved a cart containing a concealed mass. The mass had a sticky side which when placed this side down caused the cart to bounce back after colliding with a fixed object. When placed on a smooth side, the mass continues to move forward, relative to the cart, after the collision and so the cart bounces back more. Students have to figure out what could be different about the two situations .....a good thinker.

One not so simple apparatus was a "Smart Fire Extinguisher" which sought out candle flames which were located across the table and squirted water to extinguish the fire. Very Cool!



"Smart Fire Extinguisher"

After the SNO Olympics on Wednesday evening, George Vanderkuur and John Caranci put on a demo show in War Memorial Hall. It was extremely well attended with great audience participation and I smiled as I looked around at all the grown men and women playing with balloons in the audience.



George Vanderkuur

George showed the results of his extensive research on firing elastic bands. This was fascinating. I couldn't wait to try his new technique..... alas I had limited success. Perhaps I need a lesson or two. Many of our old favourite demos were revisited along with several I had never seen before. Thanks George and John for your hard work and hours of preparation which clearly went into putting together the show.

The meeting was a great success. Congratulations to all the 14 members of the University of Guelph Physics Department who formed the Hosting Committee. The amount of organization required to allow so many different sessions to run smoothly at the same time is overwhelming. I can only imagine. An excellent job everyone. Thanks to Ernie McFarland and Jim Hunt for heading up that committee. Your team rocks!

I think that the OAPT presence was well received. Thanks to John Beattie for organizing a team of representatives to provide information at the OAPT hospitality table. Many further thanks to the OAPT volunteers themselves who are John Pitre, Mike Los, Rocco de Vuono, John Diacopoulous, Kim Maynard, Malcolm Couts, Stuart Quick, and George Kelly. Many of the meeting participants were able to take

opportunities to visit surrounding tourist attractions and received excellent tips from the local OAPT members.

That's all for this year.... next year the meeting will be held in Rochester (not so far) from July 21-25. I for one, won't be missing it. The OAPT annual meeting will be May 24-26 at Trent University....See you there!

2001 CONFERENCE:
"2001 Physics Odyssey"
Trent University May 24-26, 2001
Join us at the conference!
See the OAPT Website
http://www.physics.uoguelph.ca/OAPT

Join the Ontario Association of Physics Teachers

Members receive a Newsletter and **reduced registration rates at the annual conference**.

Want to become a member?

As well, from time to time the Association makes available special resources; examples have included reprints of **"Demonstration Corner"** articles from the **Newsletter**, and the videotape, **"The Physics of Dance,"** from a presentation at one of the annual conferences.

Membership is *ONLY* $8 per year.
To become a member of the OAPT, send a cheque for $8 (or a multiple thereof) payable to OAPT to: Ernie McFarland
OAPT Membership Secretary
Department of Physics
University of Guelph
Guelph, Ontario
N1G 2W1

Annual Meeting
May 24-26, 2001
Trent University, Peterborough

CALL FOR PAPERS

Do you wish to share an idea technique of interest with your fellow teachers? Have you a special demonstration, computer program or teaching concept? Do you have interesting ideas and results from, and for, student's projects, or from studies you have done related to teaching and physics? Please consider sharing these with your colleagues by making a contributed presentation at the conference.

If you wish to make a presentation at the 2001 OAPT Conference, please return this form to:

Diana Hall
Conference Coordinator
Bell High School
40 Cassidy Road
Nepean, Ontario
K2H 6K1

Or FAX to 613-828-9022
Or E-mail to: diana_hall@ocdsb.edu.on.ca

Name: _____

School or Institution: _____

E-mail address: (I need this) _____

Phone: (home)_____ (school) _____

(fax) _____

TITLE OF PRESENTATION: _____

Time Required: 10 min: __15 min: __20 min: __30 min: __

SPECIAL NEEDS:

Do you require any audio-visual or special equipment besides an overhead projector? yes ___ no____

If yes, please describe your needs

_____

Will you be bringing any equipment yourself? yes __ no __

If yes, describe what you will be bringing:

ABSTRACT: Please include a brief summary of the specifics of your presentation on the back of this form. (*If faxing, be sure to fax both sides)

Find the Ontario Association Of Physics Teachers WEB SITE at:

http://www.physics.uoguelph.ca/OAPT

Find out about:

Past Conferences
International Conferences like Physics Teacher Education Beyond 2000, Geophysics Workshop (to Introduce Geophysics and Its Career Opportunities -- for Junior and High School Science Teachers)
Grade 12 Physics Contest held in April

EXECUTIVE OF THE OAPT

Terry Price
PRESIDENT and PROVINCE-WIDE GR. 12 PHYSICS CONTEST MAILING CO-ORDINATOR

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MEMBERSHIP SECRETARY

Doug Abe
PROVINCE-WIDE GR. 12 PHYSICS CONTEST QUESTION CO-ORDINATOR

Demonstration Corner

To show standing waves in the classroom with a minimum of fuss or equipment I use the cord of the classroom's standard appliance – the overhead projector. Use the cord in skipping rope fashion seen in profile: at one rotational rate half waves are formed, a bit faster and whole waves are formed, and I have even got one and one half waves to form. Sometimes the Aha!'s are audible.
(John Caranci)

(Hooks, Discrepant Events, Items of Cognitive Dissonance, or as a friend of mine always says "sometimes as you walk down the road you find a shinny pebble")

This corner is for you – the physics teacher with the sparkle, the jazz, the shoulder that others stand on. Please submit items for this corner to: **John Caranci 126 Charmaine Rd, Woodbridge, Ontario L4L 1K2 or to: physix@iprimus.ca**