





Dear Educator:

We would like to invite you and your students to a day of fun demos and lectures at the SFU CoLab on Pi Day, March 14, 2003. A series of activities, including a reception serving pies, pretzels and donuts, will accompany two mathematics talks by world renowned experts and some demos by our researchers. The CoLab Pi Day Open House is designed to engage gifted Grade 12 students of mathematics, other physical sciences and computer science. Interested teachers are encouraged to attend with or without their students.

Here is a brief look at the activities of the CoLab Pi Day Open House:

SFU CoLab Demonstrations

The demos will start running at 12pm and we'll organize the participants into several groups and rotate through the following demos.

1. CoLab Technologies: Smart Boards and Access Grids and CoLab's collaborating partners

The demos will start with an overview of CoLab's research activities and projects with various industrial partners such as the New Media Innovation Centre (NewMIC). Our researchers will be presenting mathematical and computational software applications while using CoLab's state-of-the-art technologies including touch-sensitive displays and wireless tools. Teachers and students will be given a chance to try out some of the technologies as well. There will also be a presentation of a human-computer-interaction assessment at this demo. A few computer stations will also be set up for participants to explore some of the software presented in the demo.

2. Virtual Laboratories:

A 3D virtual CoLab has been created to allow remote users to collaborate with researchers in the physical CoLab. Teachers and students will be given a chance to immerse themselves in this virtual environment. http://www.cecm.sfu.ca/~jborwein/Opening/vcolab.html

3. Mathematical Learning Objects:

CoLab and the Faculty of Education have developed a prototype for an online learning environment for mathematics education using learning objects. This project is funded by SSHRC under the Initiative on the New Economy. (http://www.colab.sfu.ca/sample/)

Lectures

Two lectures are planned for the open house: *The Life of Pi* by Dr. Jonathan Borwein, FRSC and *Knots in Action* by Dr. Rob Scharein. Dr. Borwein is a world expert in calculating digits of pi and Dr. Scharein is the Chief Visualization Architect for WestGrid in Vancouver. Dr. Scharein is also the creator of the KnotPlot software and is currently porting it to a virtual reality 3D environment at NewMIC.

Registration for this free event is required for all participants (deadline: March 12, 2003). As space is limited, please register early. We are enclosing more detailed information in this package for you and the relevant department heads. Thank you for your attention. If you require more information, please do not hesitate to contact me at jen@cecm.sfu.ca.

Sincerely yours,









Friday · 14 March 2003 · Simon Fraser University

Registration Form

School:

Participants:

- 1.
- 2.
- 3.
- 4.
- 5.

Teacher:

Telephone:

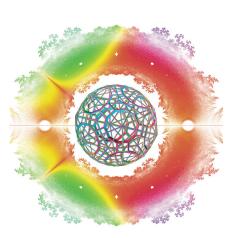
Email:

Preference for demos:



12:00pm Demos 1:00pm Demos 4:00pm Demos 5:00pm Demos

Please register by fax (604.291.5614) no later than *March 12, 2003*. Email operations@cecm.sfu.ca for more info.



Two Math Lectures

2:00 pm The Life of Pi Four millennia of pi. Jonathan Borwein

3:00 pm

Knots in Action Knots on walls, knots in tables, knots in space. Rob Scharein

Some Varied Demos

Four sessions of one-hour demos including the following components:

Technologies Smart Boards, Access Grids and VizServers The basic technologies of the CoLab

Virtual Laboratories CoLab on the Web in 3D Making the facility available everywhere

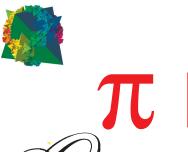
Mathematical Learning Objects SAMPLE www.colab.sfu.ca/sample

A confirmation with more information will be sent to schools once registrations are received.











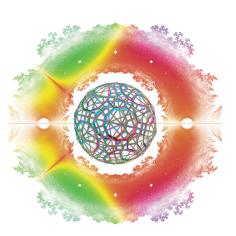




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Collaborative technologies are critical to modern research and learning. From its inception, the Centre for Experimental and Constructive Mathematics (CECM) has maintained a focus on such technologies and related web issues. Jonathan Borwein holds a Canada Research Chair in Information Technology (2001–2008), under whose aegis CoLab and CECM are building an advanced collaborative facility that is studying human computer interaction, ubiquitous and heterogeneous computing environments, and related topics (such as the use of handheld and wireless devices) with diverse academic and industrial partners.

Three areas of emphasis are *scientific* visualization, advanced publishing and distributed learning applications in mathematics. Funded by Canada Foundation for Innovation (CFI) and British Columbia Knowledge Development Fund (BCKDF), SFU CoLab opened officially on September 23, 2002 and will provide a mathematical computational environment unrivaled anywhere in Canada.



Two Math Lectures

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Knots in Action Knots on walls, knots in tables, knots in space. **Rob Scharein**

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empowering collaborations ww.colab.sfu.ca