

OPENING REMARKS

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“It would appear that we have reached the limits of what it is possible to achieve with computer technology, although one should be careful with such statements, as they tend to sound pretty silly in 5 years.”

John Von Neumann (ca. 1949)



“Change is scientific, progress is ethical; change is indubitable, whereas progress is a matter of controversy.”

Bertrand Russell



“ You better start swimming or you’ll sink like a stone for the times they are a changing. ”

Bob Dylan

ORGANIC MATHEMATICS ???????

- We have taken some grief over the choice of name but we wanted to connote something that

grows? evolves?

creeps and connects?

rots? dies?

and needs constant watering.

- The rapidly changing landscape of mathematical communication is uncharted and potentially unfriendly territory.

It is probably territory one must explore.

This is first and foremost a mathematics conference and we have come to hear mathematics lectures. But we also want to address certain questions like:

- How does one present mathematics in an interactive environment?
- How does one use mathematics in an interactive environment?

Many issues like

reliability, **readability,**

prestige, **permanence,**

seem best explored in the context of an actual experiment.

There are many aspects of current technology that many mathematicians rarely exploit

- animation
- video
- colour
- sound

Within a flurry of glitzy technological developments, can we identify what we are really likely to be doing with it 15 years from now?

“The purpose of computing is insight not numbers.”

R. W. Hamming

Our original intent (of less than a year ago) has already been subverted. Thus we will have a mix of old and new, borrowed and blue.

New technologies rapidly become passé. Just staying up to date is very difficult.

Questions concerning things like:

choices of fonts, backgrounds, icons...
exact choices of technologies;

while relevant to today's look are not particularly central to the issues.

(Though we would certainly like to hear your comments and complaints.)

The first morning of this meeting will contain a variety of demonstrations and discussions in and around some of the issues of “organic” mathematics.

This afternoon and tomorrow will be three sessions of more and less conventional mathematical lectures (some new - some expository). Please use your time in any fashion you choose.

The final day will be hands-on sessions at the Burnaby Campus of SFU where we will walk through each paper and discuss enhancements we would like to make.

We are CLEARLY in the midst of rapid technological change in the dissemination and presentation of mathematics. The questions we raise are about how we function in a period of flux.

1] How do we maintain reliability of content when anyone can publish anything?

2] How do we ensure reliability of presentation in a constantly evolving environment? What does it even mean to proof read a hypertext document?

3] How do we make intelligent choices about emerging technologies? How do we ensure that these technologies actually enhance exposition? teaching? research?

4] How much effort should be put into all of this? Or do we have no choice?