

Ideas on the Edge

Modern Math, Traditional Tweeds

A NEW MATH CENTRE AT MCMASTER UNIVERSITY BRINGS TOGETHER TRADITIONAL AND MODERN STYLES. BUT MORE IMPORTANT, IT BRINGS TOGETHER MATHEMATICIANS.

“It was a modern building wearing a tweed suit.”

That was architect Bruce Kuwabara’s reading of Hamilton Hall, the 1930s building he was asked to transform into a new home for McMaster University’s mathematics department.

The building was “collegiate gothic” in style, echoing the medieval shapes of institutions like Oxford and Cambridge. But underneath the traditional exterior was a thoroughly modern concrete and steel frame.

In Kuwabara’s re-visioning, the tweed suit stayed, but the modern interior got a major update. The structure was gutted, a four-story atrium carved through the centre, and the perimeter lined with glass-walled offices. The result was the stunning James Stewart Centre for Mathematics, named after a distinguished former member of the department.



The renovation—funded in part by the Ontario Innovation Trust—reflects what the mathematicians told Kuwabara they wanted most: a place to work together. Before the new building opened, members of the department were scattered across four floors in two different buildings, making collaboration difficult. “People think





BRADD HART

that mathematicians are very solitary,” says the head of the department, Dr. Bradd Hart, “but mathematics actually moves forward by people talking to each other. Being close to your colleagues is key.”

In the new facility, research teams are clustered

appropriately around their lead scientists, and the insights of a colleague are never more than a few steps away. Even the hallways are designed to foster interaction. Kuwabara took advantage of the old building’s extra-wide corridors to scatter blackboards and study tables throughout the Centre. Today the desks are often crowded with students and the blackboards are full of equations.

The Centre also boasts a café—essential, according to Dr. Hart, who quotes the popular aphorism: “a mathematician is a machine for converting coffee into theorems.” But the café does more than fuel abstract speculation. It

doubles as the department’s help centre, where teaching assistants and faculty are available to meet informally with students.

The renovation hasn’t been without controversy. The student newspaper initially

panned the design, charging that “the new ubermodern interior clashes with its stately

historical exterior.” But a mathematician and department



member penned a thoughtful response, defending the Centre’s dual nature. “[The paper] inadvertently provides an extremely accurate definition of contemporary mathematics itself. Stretching as far back as the Egyptians and Babylonians, mathematics is by far the oldest discipline being taught at any university today...It is hard to imagine something with a more ‘stately, historical exterior.’

“On the other hand, the very reason for the longevity

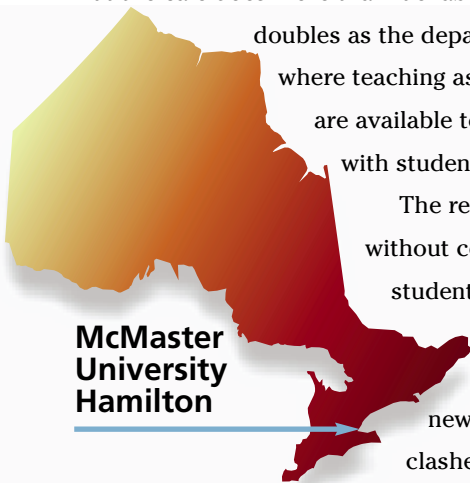
RESEARCH THAT MATTERS
REAL-WORLD BENEFITS FOR ONTARIANS:

- development of mathematical tools used in many fields, including prevention of infectious disease, genetic testing and engineering

of mathematics is its capacity to be renewed in the face of most modern problems of the day. Not being too attached to any particu-

lar application, mathematicians have been feeding their curiosity and talents with whatever challenge is current and available.”

Project: The Centre for Mathematics at McMaster University
Institution: McMaster University
Research Sector: Natural Sciences
Principal Investigator: Matthew Valeriote
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Infrastructure for Innovation About the Ontario Innovation Trust

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