

## VISITING INNOVATION PROFESSORSHIP

## The Future of Computers

Imagine if every two years we could buy a car that went twice as fast, used half the gas, and cost half the price. Can't imagine it?

Consider this: over the last sixty years, computers have evolved at that rate – every 18-24 months they're twice as fast, have double the storage, and are half the cost. Today's computers are capable of trillions of operations a second, and supercomputers, like those developed by IBM's Blue Gene program, tackle a vast array of complex problems.

These advances can help us understand how a drug works, develop a solar panel that's ten times more efficient, calculate how nuclear stockpiles degrade, or model the function of the human brain. We can harness the astonishing power of computers to improve our daily lives, but there are significant challenges ahead.

McMaster's inaugural Visiting Innovation Professor, IBM Vice President Bill Pulleyblank, has enjoyed a career spanning nearly two-thirds of the modern computing age. He led the interdisciplinary Blue Gene project that resulted in the development of the Blue Gene/L, the most powerful supercomputer in the world, and now he is leading IBM's efforts to help universities, industry, and government utilize the power of supercomputers in planning and operations.

This free public lecture will provide the audience with a ringside seat to Dr. Pulleyblank's reflections on the progress of the computer industry, the problems and potential solutions it faces, and what the future holds.



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## ABOUT THE SPEAKER

Best known for leading IBM's Deep Computing Institute and the development of the Blue Gene Project, the

world's most powerful supercomputer, Bill Pulleyblank now directs IBM's Center for Business Optimization. Established in September 2004, the Center brings together IBM's industry expertise and software, advanced mathematical research and deep computing capabilities to tackle complex business and government problems. He serves on several academic advisory boards, including the advisory council for

The IBM Blue Gene supercomputer – low-power processors and innovative hardware and software systems designs have resulted in unparalleled performance and efficiency for a powerful machine poised to tackle important problems in protein science, intelligence, physical modeling and design, and weather prediction.

the Division of Mathematical and Physical Sciences, National Science Foundation (US), and the Scientific Advisory Panel for the Fields Institute for Research in Mathematical Sciences (Canada).

DATE<br/>TIMETHURSDAY OCTOBER 18, 2007TIME7:30 p.m.LOCATION<br/>SPEAKERInformation Technology Buiding (ITB), Room AB/102William PulleyblankPh.D.Vice President, Center for Business Optimization,<br/>IBM Global Business Services

McMaster University

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