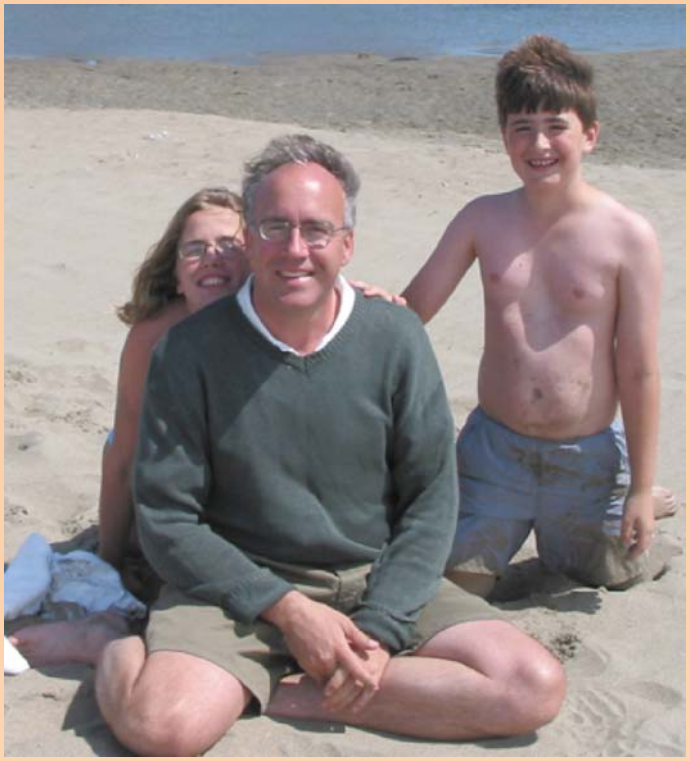
Michael Lamoureux



Facts & Achievements

He's currently a Professor of Mathematics at the University of Calgary.

Originally from Edmonton, his Bachelor of Science is from the University of Alberta.

His Master's is from Stanford University and his PhD is from Berkeley.

Michael has a daughter and son who are also great in math!

In His Own Words

Why Math?

Since I was little, I've always enjoyed taking apart radios and electronic equipment and putting them back together. Only rarely did I get an electric shock. I built my first "personal computer" in 1976, an Altair 8800, which came with an impressive 1024 bytes of memory. Things have of course progressed for you folks coming through high school in the 21st century! This enjoyment of learning how things work extends to mathematics. You can use equations and models to describe the operation of something real, or use logic to describe the function of electronic components.

Another reason for you

I have an interesting story for you. I first realized that I had a talent for math while I was in junior high school. Our math teacher told us that it was impossible to trisect a line segment using only a straight edge and compass. He was mistaken, and several of us proved him wrong. In fact, what he meant to say is that it is impossible to trisect an angle. Even more importantly, I thought Math was fun! I enjoyed geometric construction and thought that my diagrams were quite attractive! Going into university, I had a hard time choosing between physics, engineering and other sciences. I discovered that mathematics was a common theme that tied all of these subjects together.

A Research Project

I'm in charge of an interesting project at the University of Calgary called "POTSI" or "Pseudo-differential Operator Theory & Seismic Imaging." POTSI brings together mathematicians and geophysicists to create better ways of making images of the earth's subsurface, to help us find oil and gas. This is naturally an important need in the province of Alberta and also internationally. We can "see" what is underground by exploding dynamite on the surface, and observing the echoes of sound waves that bounce off structures underground. While we cannot easily put microphones underground to record those sounds where they start, we can place microphones on the earth's surface to record the tail end of the echoes. We then use mathematics to estimate what those sound waves are doing inside earth.