Earth Sciences Colloquium Series Presents



Dr. Gerhard PrattRefocused Imaging, Kingston ON
Professor Emeritus Western
University

Date: Friday, February 3, 2023

Time: 2:30 PM

Location: BGS 0153

Perspectives on the Seismic Inverse Problem: Lessons Learned from the 1980's to the Present

For three decades I was a privileged academic professor - privileged to be employed in a job that allowed me to pursue a research obsession from the very beginnings of an idea (as a junior professor), to the point at the end of my career where the same idea has now become a powerful technology used in a variety of industrial applications.

For 32 years I followed a driving interest in a fascinating subject. Bit by bit I chipped away at the little corner of geophysics I had chosen. About a decade after I started I began to realize that the tantalizing seismic puzzle I was working on (together with an incredibly talented group of students and postdocs) was possibly beginning to fall into place. After another decade the results became impressive enough that the geophysical world began to notice. Then, in the final decade of my career I saw the method widely adopted by others. That was fun and fulfilling, and I want to share some of that with you.

This talk will be a visual and anecdotal retrospective of the progress of that idea. Although "The Seismic Inverse Problem" sounds like a topic of only passing interest to non-specialists, I will do what I can to make this palatable for a general audience.

About the speaker

Gerhard Pratt worked as a professional engineer in the Oil & Gas industry before the start of his academic career. He obtained an MSc and PhD from Imperial College, London UK in the late 1980s, he was a post-doctoral fellow at the University of Toronto, and he was then a professor in three Earth Science Departments: At Imperial College from 1992 until 1998, at Queen's University until 2008, and finally at Western University until 2021. He is now retired and living in Kingston, Ontario. He is currently appointed as an Adjunct Research Professor at both Western and Queen's.

