Tuesday, March 16th, 2:30 pm

Speaker: Professor Harrison Prosper

Institution: York University

Title: Science in the Era of AI

Abstract: The number of applications of machine learning (ML), and artificial intelligence (AI) more broadly, to problems that were hitherto intractable has grown exponentially during the past decade and half. In my own field of particle physics, deep skepticism three decades ago has given way to unabashed enthusiasm for ML and the acknowledgement that AI will become inextricably linked with the practice of science, and perhaps even with science itself. What is less clear is how the partnership between AI and science will evolve. In this talk, I begin with an historical sketch of AI, in order to place the ongoing revolution in context, and follow with a discussion of examples of problems that have been solved with AI/ML, including from my field. I then describe what I consider a watershed event in AI, namely, the development of a system that can play board games such as Go at superhuman levels and discuss the potential impact such developments may have by mid-century on the future practice of science.