Modern Mathematics Workshop 2018

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SPEAKER TITLES/ABSTRACTS

MINI-COURSE 1:

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Bio:

Fokoue was born and raised in Cameroon (Central Africa), and has been around mathematical sciences from his very early childhood. He studied Mathematics and Computer Science in Cameroon, and after his Bachelor of Science Degree in Mathematics and Computer Science and his Maitrise in Computer Science and Mathematics, he earned a Master of Science Degree in Neural Computation at Aston University in England and then a PhD in Statistics at Glasgow University in Scotland (UK). Fokoue is co-author of "Principles and Theory for Data Mining and Machine Learning", a statistics graduate textbook published by Springer-Verlag. He is also author of multiple peer-reviewed articles published in international journals and has been repeatedly invited as speaker and keynote speaker at various conferences. Fokoue has always greatly enjoyed the beauty and power that mathematics brings to problem solving and thrives on sharing his mathematical insights. Statistical Science in particular and specifically Statistical Machine Learning and Data Science are his passion, his profession
and to some extent a substantial component of his vocation. Fokoue is the grateful father of his beloved daughter Ellie, and a faithful believer in the quintessential duality between scientific and authentic universal spiritual truths.

Abstract:

"Foundational Statistical Machine Learning Methods for Modern Data Science"

According to the standard Venn diagram depicting the building blocks of modern data science, algorithmics, mathematics and statistical machine learning combine to represent one of the three pillars of Data Science, along with application domain and computer science as the other two components. In this lecture, I will expose the audience to the foundational statistical machine learning methods for modern data science. The most frequently used methods of supervised learning, featuring both classification (pattern recognition) and regression are presented in greater details, with an emphasis on algorithmic clarity and statistical rigor.