

Artificial Physicists

Friday, 11 December 2015 17:10 (40 minutes)

Over the past decade, the use of machine learning algorithms to classify event types has become commonplace in particle physics. However, in many cases it's not obvious how to teach the machine what the physicist wants it to learn. I will discuss some modified classifiers developed for use in such cases, and then reflect on the questions: What is it that physicists actually do when analyzing data? How can we teach machines to do this for - and better than - us? Finally, what role will deep learning play in future particle physics experiments?

Presenter: WILLIAMS, J Michael (Massachusetts Inst. of Technology (US))