This talk will provide an overview of AWS Infrastructure, advanced services such as Machine Learning, Data Analytics, and HPC for research computing. It will give a brief outline of studies using predictive analytics including detailed overview of methods such as Machine Learning and Deep Learning using AWS. Deep learning frameworks associated with image, text and natural language processing will be outlined. Amazon Artificial Intelligence (AI) framework including AI services, platform and engine will be discussed. With recent collaboration with the national funding agencies, these cloud-related services will provide researchers access to cutting-edge technology in order to accelerate science. A few examples will be drawn from the Large Hadron Collider (LHC) at CERN, AWS Open Data Program, and NASA's Desert research. The AWS Research Initiative with funding agencies such as the National Science Foundation (NSF) in the domains related to foundation and innovative track will be discussed. The National Institutes of Health (NIH) Commons program for cloud and the AWS Research Credit program will also be outlined.

Refreshments will be served in the Physics lounge at 3:30