



Contribution ID: 268

Type: **Plenary**

## Machine Learning in the Search for New Fundamental Physics

*Tuesday, 25 October 2022 09:30 (30 minutes)*

As the search for new fundamental phenomena at modern particle colliders is a complex and multifaceted task dealing with high-dimensional data, it is not surprising that machine learning based techniques are quickly becoming a widely used tool for many aspects of searches. On the one hand, classical strategies are being supercharged by ever more sophisticated tagging algorithms; on the other hand, new paradigms —such as searching for anomalies in a data-driven way —are being proposed. This talk will review some key developments and consider which steps might be needed to maximise the discovery potential of particle physics experiments.

### **Experiment context, if any**

### **References**

### **Significance**

**Presenter:** KASIECZKA, Gregor (Hamburg University (DE))

**Session Classification:** Plenary