## Workshop on Machine Learning for Cosmic-Ray Air Showers



UNIVERSITY OF DELAWARE BARTOL RESEARCH INSTITUTE

Contribution ID: 24

Type: Talk

## Crowdsourcing your training labels with Zooniverse

Thursday, 3 February 2022 16:00 (30 minutes)

In this presentation, I will describe the Zooniverse.org citizen science platform as a tool to gather labels from over 2.5 million dedicated volunteers worldwide who are motivated to participate in scientific research. Hundreds of research teams now turn to Zooniverse for crowdsourcing tasks such as image classification and annotation which provide the large labeled data sets needed for optimal training of machine algorithms. I will provide examples from across several relevant domains including particle physics, multi-messenger astrophysics and IACT event categorization, with a focus on the Muon Hunter project used to gather millions of labels to train a CNN for an IACT calibration pipeline. I will demonstrate the ease with which a project can be developed with the Zooniverse Project Builder tools and describe the infrastructure available for integrating machine learning with Zooniverse including sophisticated active learning techniques.

## **Type of Contribution**

talk

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