

# **The First ESCAPE Citizen Science Workshop**

## **Rapport sur les contributions**

ID de Contribution: 1

Type: **Non spécifié**

## Welcome

*mercredi 2 décembre 2020 13:00 (10 minutes)*

Welcome to the workshop. A brief overview of goals and logistics.

**Orateurs:** DICKINSON, Hugh (The Open University); Prof. SERJEANT, Stephen (The Open University)

**Classification de Session:** Welcome

ID de Contribution: 2

Type: **Non spécifié**

## **Adventures in the Zooniverse**

*mercredi 2 décembre 2020 13:10 (20 minutes)*

**Orateur:** Prof. LINTOTT, Chris (University of Oxford)

**Classification de Session:** Welcome

ID de Contribution: 3

Type: **Non spécifié**

## Radio Galaxy Zoo: LOFAR

*mercredi 2 décembre 2020 13:30 (20 minutes)*

In this talk I will present the Radio Galaxy Zoo: LOFAR project. In this citizen science project, volunteers are asked associate components of radio sources and to match radio sources to their optical counterpart. I will give an insight into the experience of building and running the LOFAR version of the Radio Galaxy Zoo project.

**Orateur:** M. OSINGA, Erik (Leiden University)

**Classification de Session:** What is possible?

ID de Contribution: 4

Type: **Non spécifié**

## A zooniverse project to find solar jets

*mercredi 2 décembre 2020 13:50 (20 minutes)*

The Solar Dynamic Observatory (SDO) provides high-cadence, high-resolution images of the Sun in extreme ultraviolet (EUV) since 2011. In this regime, the solar atmosphere features and dynamics can be studied with great detail, but the amount of data produced also raised challenges. While some features are well detected by automated algorithms, other, such as solar jets, remain best detected by the human eye. We present here what are solar jets, why they are interesting features of the solar activity, and the need for a citizen science approach to the detection and catalog of solar jets. The goal and challenges of the zooniverse project created to answer this need will then be discussed.

**Orateur:** MUSSET, Sophie (University of Glasgow)

**Classification de Session:** What is possible?

ID de Contribution: 5

Type: **Non spécifié**

## **REINFORCE - Research Infrastructures FOR Citizens in Europe**

*mercredi 2 décembre 2020 14:10 (20 minutes)*

The REINFORCE project aims to engage and support citizens to co-operate with researchers and actively contribute in the development of new knowledge for the needs of science and society. The project will create a series of cutting-edge citizen science projects on frontier physics - gravitational-wave noise-hunting, neutrino astronomy, new-particle identification and cosmic muon images - with citizen scientists making a genuine and valued contribution to managing the data avalanche. Citizens will be engaged in the research done in large research infrastructures through a participatory design methodology that will take into account the characteristics of different target groups, barriers, perceptions, biases and attitudes regarding science.

**Orateur:** HEMMING, Gary (European Gravitational Observatory)

**Classification de Session:** What is possible?

ID de Contribution: 6

Type: **Non spécifié**

## Searching for substructures with "Galaxy Zoo: Clump Scout"

*mercredi 2 décembre 2020 16:40 (20 minutes)*

Early-Universe galaxies often host bright, compact substructures known as "giant star-forming clumps". By comparison, very few galaxies today host anything like this. Studies of these clumps have been hampered by the fact they are very difficult to precisely define. This talk will describe the "Galaxy Zoo: Clump Scout" project, which aims to visually classify the clumpiness of over 50,000 galaxies in the local Universe in hopes of finding analogs to their more distant counterparts.

**Orateur:** M. ADAMS, Nico (University of Minnesota)

**Classification de Session:** What is possible?

ID de Contribution: 7

Type: **Non spécifié**

## Introducing Caesar

*mercredi 2 décembre 2020 16:00 (20 minutes)*

The Zooniverse Caesar engine allows researchers to define detailed rules and criteria that should be fulfilled for a subject to be retired from classification. This presentation provides a short overview of the capabilities of Caesar, in preparation for a more in-depth hands-on tutorial on day 2.

**Orateur:** DICKINSON, Hugh (The Open University)

**Classification de Session:** What is possible?



ID de Contribution: 8

Type: **Non spécifié**

## Training and feedback

*mercredi 2 décembre 2020 16:20 (20 minutes)*

The Zooniverse platform provides advanced functionality that allows volunteers to receive real-time feedback for a subset of their classifications. This can help to improve the accuracy of volunteer classifications and boost their confidence. Confident volunteers tend to remain with the project longer and provide more data for your research. This talk presents some different examples of how feedback could be used in your projects.

**Orateur:** DICKINSON, Hugh (The Open University)

**Classification de Session:** What is possible?

ID de Contribution: 9

Type: **Non spécifié**

## **Building a project using the project builder**

*mercredi 2 décembre 2020 14:45 (1 heure)*

During this session we will demonstrate, step-by-step, how to build a new project using the Zooniverse “Project Builder” interface. The Project Builder allows researchers to design, create, deploy and manage a simple Zooniverse projects using a friendly graphical user interface.

We will explain how to create a new project, add tutorial and pedagogical material, set up a classification workflow and upload subject data.

**Orateur:** DICKINSON, Hugh (The Open University)

**Classification de Session:** What is possible?

ID de Contribution: **10**

Type: **Non spécifié**

## Advanced project building

*jeudi 3 décembre 2020 13:15 (1 heure)*

In this session we will build upon the lessons learned on day 1. We will show how to build and manage large projects using a powerful Python API. We will also learn how to collect, aggregate and begin to analyse the volunteer classifications of your project will generate.

**Orateur:** DICKINSON, Hugh (The Open University)

**Classification de Session:** Tutorials

ID de Contribution: 11

Type: **Non spécifié**

## Advanced Caesar Usage

*jeudi 3 décembre 2020 14:30 (1 heure)*

This session builds on the introduction to Caesar during day 1. We will learn how to use metadata to restrict Caesar rules and effects to specific subjects and how to monitor the way in which your rules are being applied. We will learn how you can straightforwardly extend the functionality of the Caesar engine with some simple Python coding. Finally we will show how you can use Caesar's external reducers to make subject retirement decisions based on computationally expensive analyses.

**Orateurs:** Dr KRAWCZYK, Coleman (University of Portsmouth); DICKINSON, Hugh (The Open University)

**Classification de Session:** Tutorials

ID de Contribution: 12

Type: **Non spécifié**

## **Citizen Science with Machine Learning**

*jeudi 3 décembre 2020 15:45 (1 heure)*

Many modern analysis pipelines rely on machine learning or deep learning to process large datasets. Citizen science can be used to help generate training datasets for machine learning models and those models can then be used to accelerate retirement in citizen science projects. We will show with examples how you can integrate machine learning with your Zooniverse project.

**Orateurs:** DICKINSON, Hugh (The Open University); WALMSLEY, Mike (University of Oxford)

**Classification de Session:** Tutorials

ID de Contribution: 13

Type: **Non spécifié**

## **Review of day 1 and preview of day 2**

*jeudi 3 décembre 2020 13:00 (15 minutes)*

**Orateur:** DICKINSON, Hugh (The Open University)

**Classification de Session:** Welcome

ID de Contribution: 15

Type: **Non spécifié**

## **Review of day 2 and overview of day 3**

*vendredi 4 décembre 2020 13:00 (15 minutes)*

**Orateur:** DICKINSON, Hugh (The Open University)

**Classification de Session:** Welcome

ID de Contribution: 16

Type: **Non spécifié**

## Project building sprint!

*vendredi 4 décembre 2020 13:15 (3h 45m)*

A whole four hour session for attendees to start building their own projects with help from Zooniverse experts and experienced researchers.

**Orateurs:** Dr KRAWCZYK, Coleman (University of Portsmouth); M. OSINGA, Erik (Leiden University); DICKINSON, Hugh (The Open University); WALMSLEY, Mike (University of Oxford); M. ADAMS, Nico (University of Minnesota); MUSSET, Sophie (University of Glasgow); SERJEANT, Stephen (The Open University)

**Classification de Session:** Project Building