

# **Simulation-based inference with Swyft**



## **Report of Contributions**

Contribution ID: 4

Type: **not specified**

# Analysing stellar streams with Swyft

*Tuesday, 24 January 2023 11:40 (25 minutes)*

**Presenter:** ALVEY, James (University of Amsterdam)

**Session Classification:** Existing applications

Contribution ID: 5

Type: **not specified**

# Swyft for Cosmological N-body simulations

*Tuesday, 24 January 2023 12:05 (25 minutes)*

**Presenter:** DIMITRIOU, Androniki (IFIC, Valencia)

**Session Classification:** Existing applications

Contribution ID: 6

Type: **not specified**

## SN Ia cosmology with TMNRE

*Wednesday, 25 January 2023 12:05 (25 minutes)*

**Presenter:** KARCHEV, Konstantin (SISSA / GRAPPA)

**Session Classification:** Existing applications

Contribution ID: 7

Type: **not specified**

## GW parameter inference with Swyft

*Tuesday, 24 January 2023 16:10 (25 minutes)*

**Presenter:** BHARDWAJ, Uddipta (GRAPPA, University of Amsterdam)

**Session Classification:** Existing applications

Contribution ID: 8

Type: **not specified**

## Studying strong lensing images with Swyft

*Tuesday, 24 January 2023 14:50 (25 minutes)*

**Presenter:** ANAU MONTEL, Noemi (GRAPPA)

**Session Classification:** Existing applications

Contribution ID: 9

Type: **not specified**

# High-dimensional nested sampling

*Thursday, 26 January 2023 09:00 (25 minutes)*

**Presenter:** HANDLEY, Will (University Of Cambridge)

**Session Classification:** Method session

Contribution ID: 10

Type: **not specified**

## High-dimensional prior truncation

*Thursday, 26 January 2023 09:25 (25 minutes)*

**Presenter:** SCHEUTWINKEL, Kilian (University of Cambridge)

**Session Classification:** Method session

Contribution ID: 11

Type: **not specified**

## Millisecond pulsars in globular clusters

*Wednesday, 25 January 2023 14:25 (25 minutes)*

**Presenter:** BERTEAUD, Joanna (LAPTh (CNRS/USMB))

**Session Classification:** New applications

Contribution ID: 12

Type: **not specified**

## **Dissecting the Galactic and extragalactic GeV gamma-ray sky with simulation-based inference**

*Wednesday, 25 January 2023 14:50 (25 minutes)*

**Presenter:** ECKNER, Christopher (LAPP, CNRS)

**Session Classification:** Existing applications

Contribution ID: 13

Type: **not specified**

## Diffusion models and N-body simulations

*Tuesday, 24 January 2023 14:00 (25 minutes)*

**Presenter:** CORREA, Camila (UvA)

**Session Classification:** Method session

Contribution ID: 15

Type: **not specified**

## The future of cosmology with Euclid: hopes & challenges

*Thursday, 26 January 2023 09:50 (1 hour)*

**Presenters:** CAÑAS-HERRERA, Guadalupe (European Space Research and Technology Centre/European Space Agency); MARTINELLI, Matteo (INAF - Osservatorio Astronomico di Roma); ILIC, Stéphane (IJ-CLab, Orsay, France)

**Session Classification:** New applications

Contribution ID: 16

Type: **not specified**

# Analysing the Fermi Galactic Center Excess with Machine Learning

*Wednesday, 25 January 2023 14:00 (25 minutes)*

**Presenter:** LIST, Florian (University of Vienna)

**Session Classification:** New applications

Contribution ID: 17

Type: **not specified**

## **Simulation-based inference for axions at colliders**

*Wednesday, 25 January 2023 15:45 (25 minutes)*

**Presenter:** MORANDINI, Alessandro (KIT, IAP)

**Session Classification:** New applications

Contribution ID: **18**

Type: **not specified**

## **Shedding light on low-mass subhalo survival and annihilation luminosity with numerical simulations**

*Tuesday, 24 January 2023 15:45 (25 minutes)*

**Presenter:** AGUIRRE-SANTAELLA, Alejandra (Instituto de Física Teórica UAM-CSIC)

**Session Classification:** New applications

Contribution ID: 21

Type: **not specified**

## **An overview of Simulation-based Inference methods and software**

*Wednesday, 25 January 2023 11:40 (25 minutes)*

**Presenter:** MILLER, Benjamin (University of Amsterdam)

**Session Classification:** Method session

Contribution ID: 25

Type: **not specified**

# Current Nested Sampling methods for Gravitational Lens Modelling

*Tuesday, 24 January 2023 14:25 (25 minutes)*

**Presenter:** LANGE, Samuel (Durham University)

**Session Classification:** New applications