

Bienvenue! Welkom! ترحيب
Willkommen! 歡迎光臨 Καλώς ήρθες! Fáilte!
Benvenuti! Bem-vindos! Добро пожаловать!
Isten hozta! Bienvenidos! Witajcie! Karşılama!
Welcome!

<https://indico.in2p3.fr/e/gw-odw2>

Gravitational wave
Open Data Workshop #2
Paris, April 8-10 2019

AstroParticule & Cosmologie
Paris Diderot University

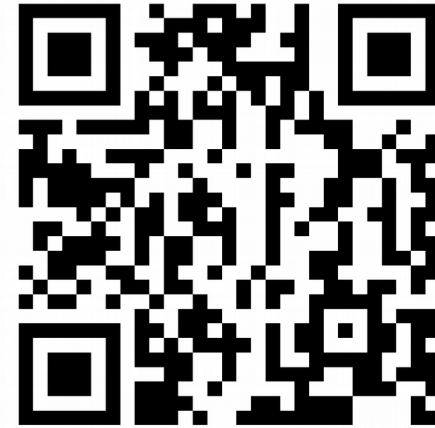
*Three-day workshop to learn how to access and
analyze LIGO and Virgo data*

<http://www.gw-openscience.org>



Learning objectives

- **Basics about gravitational-wave detectors**
 - Measurement principle, detector response to gravitational wave, calibration and systematic, major noise sources
- **Open data access, visualization and basic pre-processing**
 - Access, visualization, filtering and whitening
- **Compact binary mergers**
 - Gravitational waveform models, Matched filtering techniques, analysis background and transient noise rejection, Bayesian estimation of compact binary parameters, source sky localization
- **Workflows**
 - Searches and parameter estimation



GW Open Data Workshop
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Program

<https://indico.in2p3.fr/e/gw-odw2>

Mon

Lectures 1

Basics, h(t) and
data quality,
open data and access

Tue

Lectures 2

Compact binaries
Waveform and searches
Param estimation
Sky loc & multimessenger

Wed

Challenge!

Apply your
knowledges

Cool prizes!

Hands-on

Hands-on



Informal Q & A

Room location

<https://indico.in2p3.fr/e/gw-odw2>

Mon

Lectures 1

This hall
Amphi PG de Gennes
(level -1)

Tue

Lectures 2

This hall
Amphi PG de Gennes
(level -1)

Wed

Challenge !

Room 454A
4th floor

Hands-on

In various rooms
Look up your name
on **attendance sheet**

Hands-on

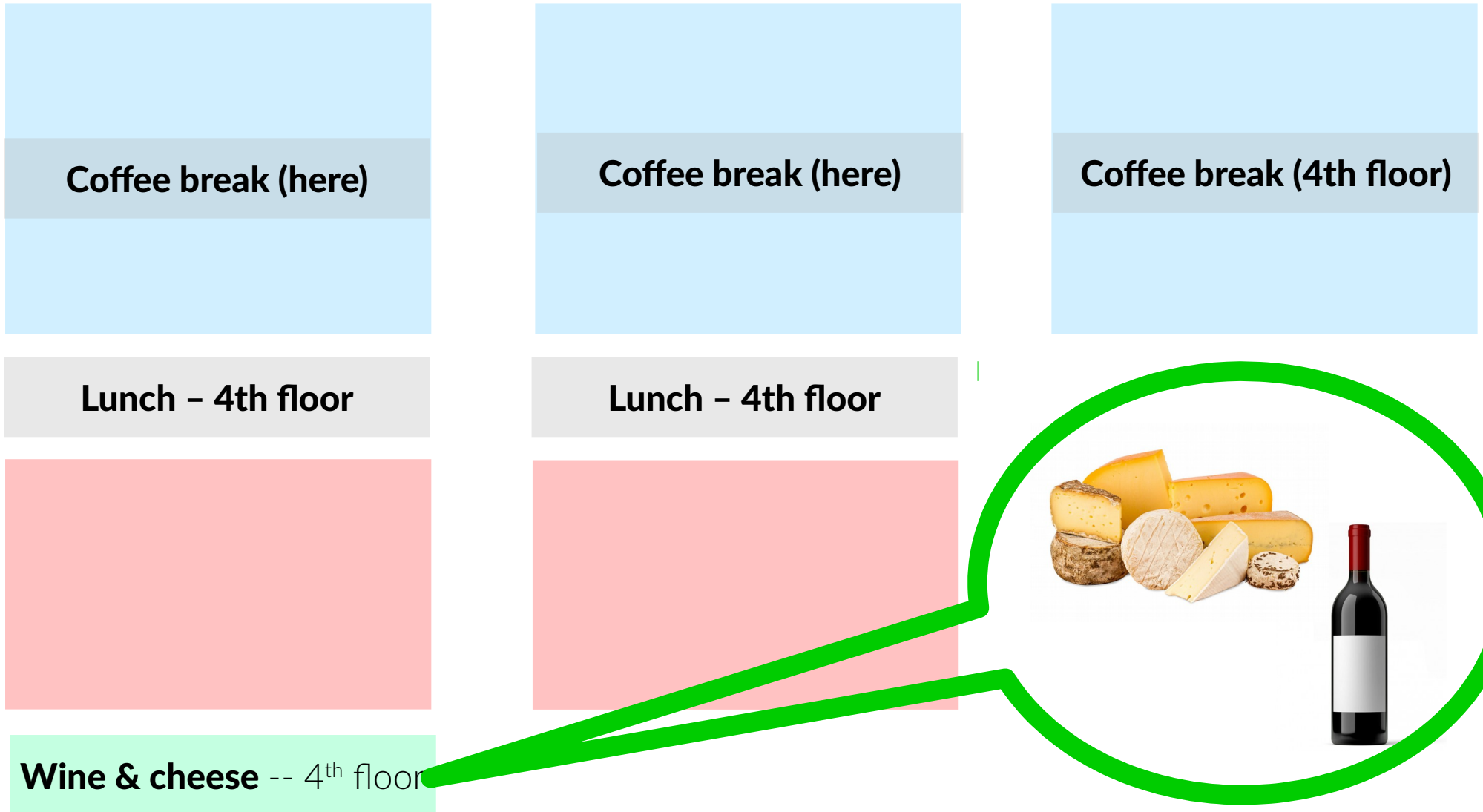
In various rooms
Look up your name
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<https://bit.ly/2WRxjay>

Q & A, room 454A

Energy

<https://indico.in2p3.fr/e/gw-odw2>



Hands-on sessions & challenge

<https://github.com/gw-odw/odw-2019>

- **Bring your laptop computer!!**

- Installation instructions

<https://github.com/gw-odw/odw-2019/blob/master/setup.md>

Run on your computer or using the cloud: Google Colab

- **Access to internet**

- eduroam
- use network/ssid **up7d** with the id/passwd on your name tag

- **Data challenge on Wed morning**

- The questions (easy → difficult) are already online
- The data sets will be released on Wed morning

<https://github.com/gw-odw/odw-2019/blob/master/Challenge/CHALLENGE.md>

Thank you!

- **Lecturers, tutors and other contributors**

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- **Local support and organisation**

Marc Arene, Simone Mastrogiovanni, Michal Bejger, Fangchen Feng
Sarodia Vydelingum and Sabine Tesson

- **Sponsors**

EGO European
Gravitational
Observatory

cnrs IN2P3
Les deux infinis



Asterics Astronomy ESRI & Research Infrastructure Cluster

PNHE Programme national hautes énergies

GPhys

Enjoy the meeting!