

Analysis Preservation Training

CI/CD + Containerization

October 16 - 18, 2023



Instructors:

- CI / CD: Mason Proffitt
- Docker: Marco Donadoni
- REANA: Tibor Simko

Mentors and local organizers:

- Carlos Escobar
- Miguell Vilaplana
- Emma Torro



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VNIVERSITAT DE VALÈNCIA Departament de Física Atòmica,
Molecular y Nuclear



Everyone is Welcome

- You are physicists working in international collaborations. All of you should know this page:
 - [The CERN code of conduct](#)
- Built on a set of core CERN values →
- Taken together, provide the basis for respect: respect for others, respect for the organization and respect for its mission.
- We encourage a culture of openness where all contributors feel free to engage in the discussion.



(Slides adapted from [previous HSF bootcamp](#))

What is Analysis Preservation?

- Methodology intended to ensure that materials produced in the analysis process
 - Datasets
 - Software
 - Documentationare reusable and understandable in the future.
- **Data is expensive. Experiments are unique.**
 - Preserving the knowledge around them is a must.
- Analysis preservation is work-in-progress in most of the experiments.
 - Many technical challenges involved.
 - We will not focus in a particular preservation scenario.
 - Instead, we will review the tools useful for preservation.

What are we learning this week?

- We will take a quick tour learning the basic functionality of tools popular in analysis preservation.
 - **Containerization technologies**
 - Docker
 - Singularity/Apptainer
 - **Continuous Integration/Deployment (CI/CD)**
 - GitLab pipes
 - GitHub actions



Monday

11:30 **Welcome**

11:50

Help with setup

13:00 **Lunch**

14:00

CI / CD

16:00

16:30

Tuesday

09:00

Docker

11:00

11:30

13:30 **Lunch**

14:30

Catch up

16:30

17:00

Wednesday

09:00

REANA

10:30

11:00

13:00 **Lunch**

14:00

Catch up

If you haven't done yet...

[1] Follow the setup pages

- CI/CD with GitLab [here](#)
- Docker [here](#)
- REANA [here](#)

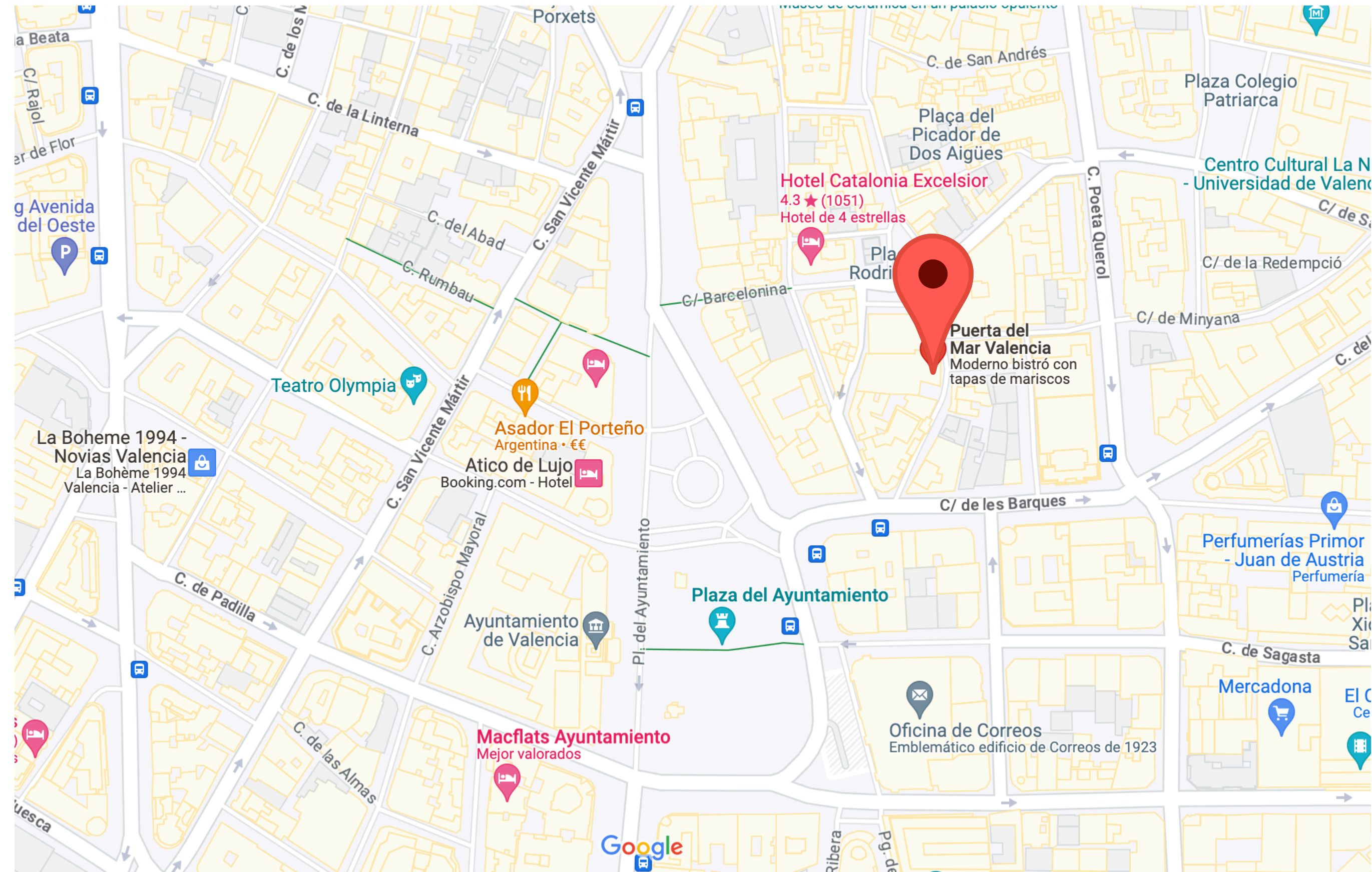
[2] Take a look at [Analysis example with CMS open data](#)

Logistics

[1] Lunch will be at IFIC's cafeteria

[2] Dinner will be on Tuesday at 20:30

Restaurante Puerta del Mar: <https://www.restaurantepuertadelmar.com/>



[3] Wifi: eduroam

Menu for dinner — second dish choices

Please add your name to your preferred choice here:

https://docs.google.com/document/d/129aeNzr_uSBL_Z70XsctdtknZC3uMaSv69VPdLiPT9Y/edit

- Iberian cheek with mushroom sauce, parmentier and yuka chips
 - *Carrillera ibérica con salsa de setas, parmentier y chips de yuka*

- Baked cod with soft garlic mousseline and Valencian ratatouille
 - *Bacalao al horno con muselina suave de ajo y pisto valenciano*

- Grilled turbot
 - *Rodaballo a la brasa*

- Entrecote from the Basque Country grilled with potatoes and Padrón peppers
 - *Entrecot del Pais Vasco a la brasa con patatas y pimientos de Padrón*