

HighRR TFR Hands-On: welcome

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HighRR TFR Hands-On



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The HighRR TFR Hands-On

Welcome to the HighRR TFR Hands-on!

TFR = ?

In the next days:

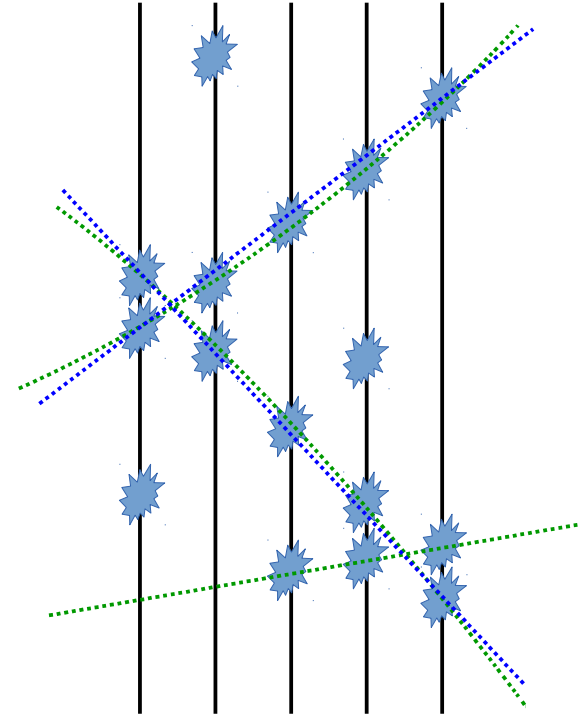
- a lot of fitting***
- nothing of reconstruction***

Tracking

Detector:
hits from particles

Tracking:
combine hits to reconstruct tracks

- find the tracks:
 pattern recognition
- measure track parameters:
 track fitting



The schedule

Monday 29th May → Friday 2nd June
Sessions: 9.15 → 12.00

Day 1) simulation, propagator in B

Day 2) χ^2 fit

Day 3) Kalman filter

Day 4) χ^2 vs Kalman

Day 5) D0 decay reconstruction

Social event? :)

Get the code

- go to the project page:

https://gitlab.com/apiucci/HighRR_TrackingHandsOn_handson

- fork the project

- set your credentials

```
git config --global user.name "<your-name>"
```

```
git config --global user.email <your-email>
```

- get the forked code locally

```
git clone --recursive
```

```
https://<username>@gitlab.com/<username>/HighRR_TrackingHandsOn_handson.git
```

- set the upstream

```
git remote add upstream
```

```
https://apiucci@gitlab.com/apiucci/HighRR_TrackingHandsOn_handson.git
```

- you are ready to play!

How it will work

Every-day schedule:

1) a few slides describing some idea, and how to implement it

2) create a new branch in your forked project, named Day<...>

`git checkout -b Day<1-5>`

`git push origin Day<1-5>`

3) get the updated code

`git fetch --all`

`git merge upstream/master` *(cross your fingers here...)*

4) search for the “ TASK: “ comments in the code,
and **write your implementation**

Modify the code

You may want to save your changes in the repository

```
alessio@alessio:~/HighRR_TrackingHandsOn_handson$ emacs README.md
alessio@alessio:~/HighRR_TrackingHandsOn_handson$ git status
Sul branch master
Il tuo branch è avanti rispetto a 'origin/master' di 2 commit.
(use "git push" to publish your local commits)
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)
```

```
    modified:   README.md
```

```
no changes added to commit (use "git add" and/or "git commit -a")
alessio@alessio:~/HighRR_TrackingHandsOn_handson$ git add README.md
alessio@alessio:~/HighRR_TrackingHandsOn_handson$ git commit -m "Something that I've changed"
[master 20486f7] Something that I've changed
 1 file changed, 1 insertion(+), 1 deletion(-)
alessio@alessio:~/HighRR_TrackingHandsOn_handson$ git push
Password for 'https://apiuucci@gitlab.com':
Counting objects: 7, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 773 bytes | 0 bytes/s, done.
Total 7 (delta 3), reused 0 (delta 0)
To https://gitlab.com/apiuucci/HighRR_TrackingHandsOn_handson.git
 0cfb417..20486f7  master -> master
```

➔ **modify the file**

➔ ***git add***
'tag' the file

➔ ***git commit***
register the changes

➔ ***git push***
send the changes
to the online server

***Thanks to Simon
for the huge help!***