

How to GIT Clone with SSH

2025 US Summer Workshop

Step 1: SSH Keys

- Create SSH Keys

```
ssh-keygen -C "Alice's Laptop"
```

- Copy public key

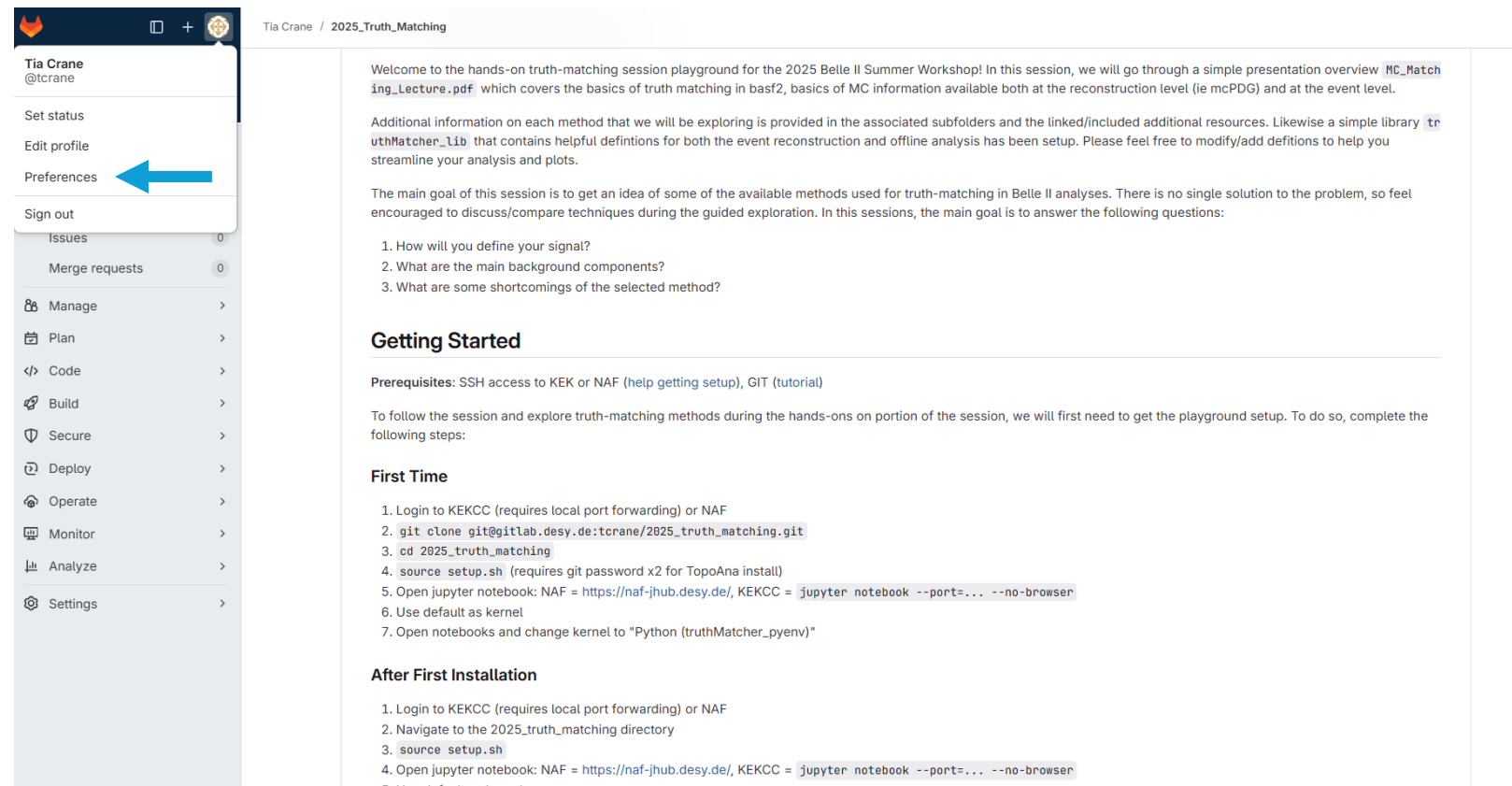
```
cat ~/.ssh/id_rsa.pub
```

Step 2: Add SSH Key to GitLab

- Go to your profile on <https://gitlab.desy.de/>

- Click on your profile Icon

- Click “Preferences”



The screenshot shows the GitLab profile page for Tia Crane. The left sidebar contains the user's profile information and a list of navigation options. The 'Preferences' option is highlighted with a blue arrow. The main content area shows the '2025_Truth_Matching' repository page, which includes a welcome message, additional information, and a list of questions for the session.

Tia Crane
@tcrane

- Set status
- Edit profile
- Preferences
- Sign out

Issues 0

Merge requests 0

- Manage
- Plan
- Code
- Build
- Secure
- Deploy
- Operate
- Monitor
- Analyze
- Settings

Tia Crane / 2025_Truth_Matching

Welcome to the hands-on truth-matching session playground for the 2025 Belle II Summer Workshop! In this session, we will go through a simple presentation overview [MC_Matching_Lecture.pdf](#) which covers the basics of truth matching in basf2, basics of MC information available both at the reconstruction level (ie mcPDG) and at the event level.

Additional information on each method that we will be exploring is provided in the associated subfolders and the linked/included additional resources. Likewise a simple library [truthMatcher_lib](#) that contains helpful definitions for both the event reconstruction and offline analysis has been setup. Please feel free to modify/add definitions to help you streamline your analysis and plots.

The main goal of this session is to get an idea of some of the available methods used for truth-matching in Belle II analyses. There is no single solution to the problem, so feel encouraged to discuss/compare techniques during the guided exploration. In this sessions, the main goal is to answer the following questions:

1. How will you define your signal?
2. What are the main background components?
3. What are some shortcomings of the selected method?

Getting Started

Prerequisites: SSH access to KEK or NAF ([help getting setup](#)), GIT ([tutorial](#))

To follow the session and explore truth-matching methods during the hands-ons on portion of the session, we will first need to get the playground setup. To do so, complete the following steps:

First Time

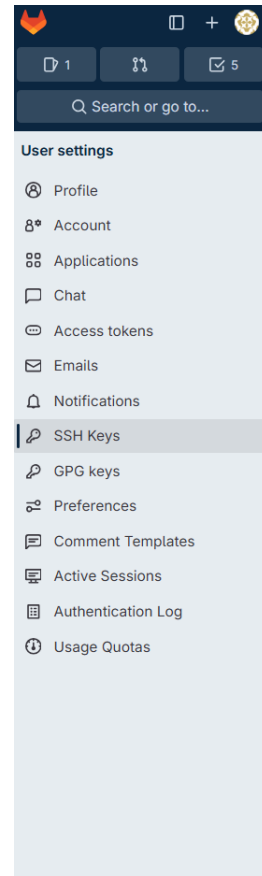
1. Login to KEKCC (requires local port forwarding) or NAF
2. `git clone git@gitlab.desy.de:tcrane/2025_truth_matching.git`
3. `cd 2025_truth_matching`
4. `source setup.sh` (requires git password x2 for TopoAna install)
5. Open jupyter notebook: NAF = <https://naf-jhub.desy.de/>, KEKCC = `jupyter notebook --port=... --no-browser`
6. Use default as kernel
7. Open notebooks and change kernel to "Python (truthMatcher_pyenv)"

After First Installation

1. Login to KEKCC (requires local port forwarding) or NAF
2. Navigate to the 2025_truth_matching directory
3. `source setup.sh`
4. Open jupyter notebook: NAF = <https://naf-jhub.desy.de/>, KEKCC = `jupyter notebook --port=... --no-browser`
5. Use default as kernel

Step 2: Add SSH Key to GitLab

- Click “SSH Keys”
- Click “Add New Key”



User Settings / SSH Keys

Search settings

SSH Keys

SSH keys allow you to establish a secure connection between your computer and GitLab. SSH fingerprints verify that the client is connecting to the correct host. Check the [current instance configuration](#).

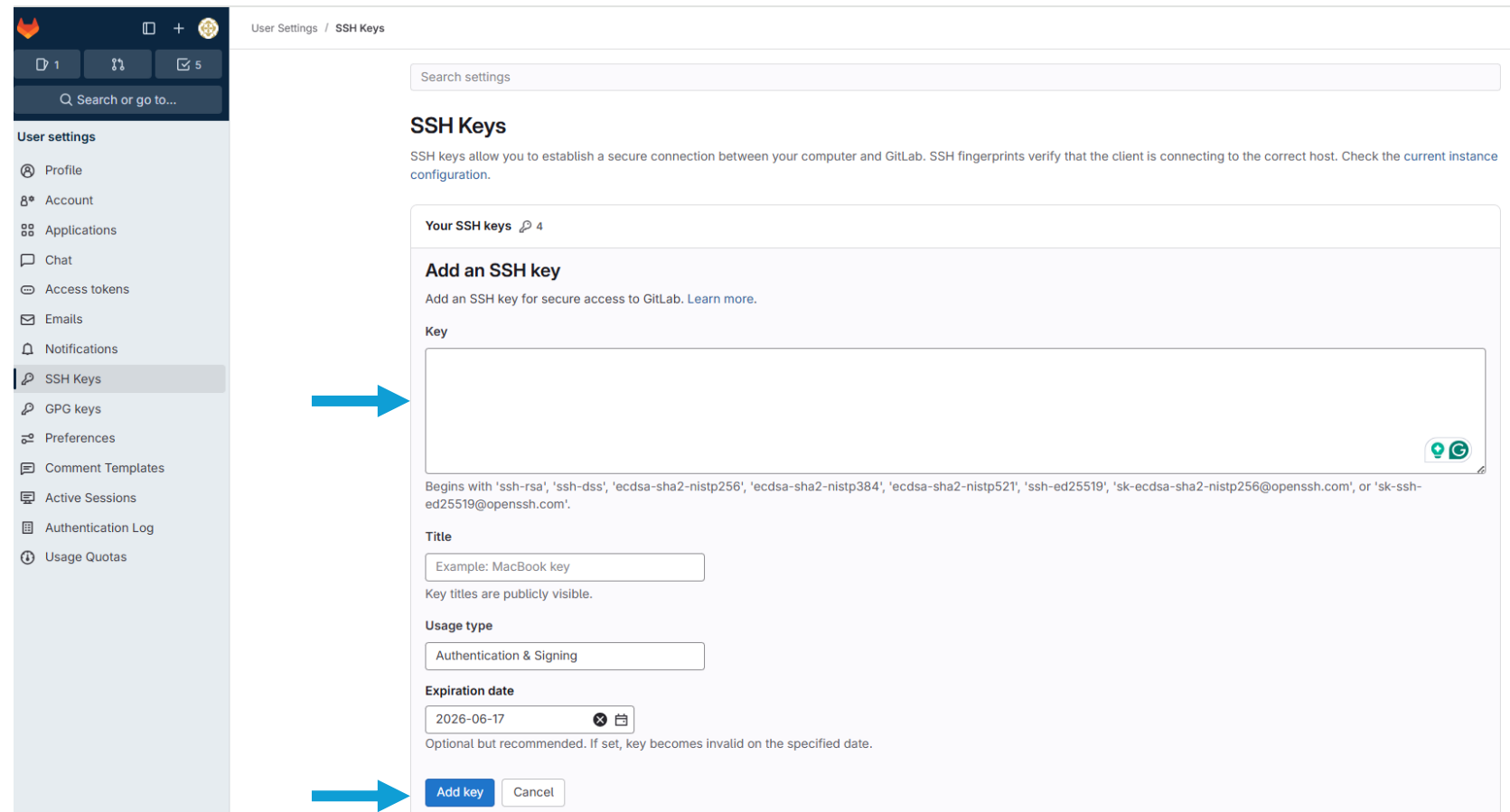
Your SSH keys 4

Add new key

Title	Key	Usage type	Created	Last used	Expires	Actions
Tia KEK	bf:27:b5:6f:9a:61:36:d2:5c:e4:b3:26:eb:2a:c0:f2	Authentication & Signing	1 day ago	15 minutes ago	2026-06-15	Revoke
tia.crane@desy.de	e5:ab:40:60:7b:94:b6:92:f9:a0:ac:bd:1b:81:70:27	Authentication & Signing	3 months ago	1 day ago	2026-03-04	Revoke
tiacrane@ccw04.cc.kek.jp	df:97:98:a7:8e:3f:a5:01:f6:eb:f6:8d:09:ac:bc:34	Authentication & Signing	1 year ago	Never	Expired 2025-05-09	Revoke
tiacrane@ccw04.cc.kek.jp	93:a1:ef:00:0c:84:f2:72:f9:d3:0a:ca:2a:6f:a0:76	Authentication & Signing	1 year ago	Never	Expired 2025-05-09	Revoke

Step 2: Add SSH Key to GitLab

- Copy your public key into “Key”
- Click “Add Key”



User Settings / SSH Keys

Search settings

SSH Keys

SSH keys allow you to establish a secure connection between your computer and GitLab. SSH fingerprints verify that the client is connecting to the correct host. Check the [current instance configuration](#).

Your SSH keys 4

Add an SSH key

Add an SSH key for secure access to GitLab. [Learn more](#).

Key

Begins with 'ssh-rsa', 'ssh-dss', 'ecdsa-sha2-nistp256', 'ecdsa-sha2-nistp384', 'ecdsa-sha2-nistp521', 'ssh-ed25519', 'sk-ecdsa-sha2-nistp256@openssh.com', or 'sk-ssh-ed25519@openssh.com'.

Title

Example: MacBook key

Key titles are publicly visible.

Usage type

Authentication & Signing

Expiration date

2026-06-17

Optional but recommended. If set, key becomes invalid on the specified date.

Add key Cancel

Step 2: Clone Repo

- Navigate to repo you want to clone

- Click “Code”

- Copy “Clone with SSH”

The screenshot shows the GitLab web interface for the repository '2025_Truth_Matching' by Tia Crane. A blue arrow points to the address bar showing the URL 'gitlab.desy.de/tcrane/2025_truth_matching'. Another blue arrow points to the 'Code' button in the top right of the repository view. A third blue arrow points to the 'Clone with SSH' option in the dropdown menu that appears after clicking 'Code'. The repository page includes a file list with columns 'Name' and 'Last commit', project information (13 commits, 1 branch, 0 tags, 12.6 MIB storage), and a 'ReadMe.md' file. The 'ReadMe.md' content is visible at the bottom of the page.

2025_Truth_Matching

Name	Last commit
basf2_modules	setup tested on KEK, clean up nd
custom_extraction	setup tested on KEK, clean up nd
topoana_analysis	topoana version
truthMatcher_lib	setup tested on KEK, clean up nd
MC_Matching_Lecture.pdf	Update lecture and ReadMe base
ReadMe.md	topoana version
Reconstruction_Pipeline.py	revise path, draft template script
setup.py	revise setup
setup.sh	topoana version

Project information

- 13 Commits
- 1 Branch
- 0 Tags
- 12.6 MIB Project Storage

Created on May 24, 2025

MC Truth Matching Hands-On

Welcome to the hands-on truth-matching session playground for the 2025 Belle II Summer Workshop! In this session, we will go through a simple presentation overview [MC_Matching_Lecture.pdf](#) which covers the basics of truth matching in basf2, basics of MC information available both at the reconstruction level (ie mcPDG) and at the event level.

Additional information on each method that we will be exploring is provided in the associated subfolders and the linked/included additional resources. Likewise a simple library [truthMatcher_Lib](#) that contains helpful definitions for both the event reconstruction and offline analysis has been setup. Please feel free to modify/add definitions to help you streamline your analysis and plots.

Step 3: Clone Repo (Terminal)

- Paste in terminal

`git clone <link>`

- Enter password