

BLonD Community Meeting

24 February 2023

Suggestions for BLoND development organization

- Teams to organize/ distribute the coding tasks
 - Applications:
 - Present latest studies, challenges, new/ missing features
 - Drive the BLoND development (features/ tools, etc)
 - Code management/ optimization
 - Supporting tools, documentation, distribution, performance, etc
- E-groups:
 - Create new e-group: blond-community (include everyone working with blond)
 - Reduce blond-developers group to developers only

Gitlab vs Github

• Github: No more free CI/CD

Select Plan

Monthly Plans

Annual Plans



Travis CI

Trial Plan

Free

- ✓ 20 concurrent jobs
- ✓ Private & Open-Source repos
- ✓ Linux, Windows, macOS, FreeBSD

Select plan

Learn more

1 Concurrent plan

\$69/monthly

- ✓ 1 concurrent job
- ✓ Private & Open-Source repos
- ✓ Linux, Windows, macOS, FreeBSD

Select plan

Learn more

2 Concurrent plan

\$129/monthly

- ✓ 2 concurrent jobs
- ✓ Private & Open-Source repos
- ✓ Linux, Windows, macOS, FreeBSD

Select plan

Learn more

5 Concurrent plan

\$249/monthly

- ✓ 5 concurrent jobs
- ✓ Private & Open-Source repos
- ✓ Linux, Windows, macOS, FreeBSD

Select plan

Learn more



GitHub Actions

A GitHub Free account comes with 2,000 minutes a month that can be used on private repositories (developers have unlimited use of GitHub Actions on a public repository with a self-hosted runner).

Operating system	Minute multiplier
Linux	1
MacOS	10
Windows	2


- Gitlab: Not fully accessible without CERN account
 - Can only read, not modify

- Solutions
 - a. Host in Github, Gitlab mirror + CI/CD
 - b. Host in Gitlab + CI/CD, Github mirror

Code development progress


- Based on the discussion of the [previous BLonD meeting](#) (10/02/23)


- Created **4 new issues**:


☐  **Tools and scripts for batch submission** enhancement Idea performance


#215 opened yesterday by kiliakis  3 tasks


☐  **Upgrade of CI/CD automation tools** clean-up enhancement

#214 opened yesterday by kiliakis  5 tasks

☐  **Simplify installation/ distribution** clean-up documentation enhancement

#213 opened yesterday by kiliakis  3 tasks

☐  **Consolidation of the BLonD examples** documentation enhancement

#212 opened yesterday by kiliakis  3 tasks

- Merged [new GPU backend PR](#)
 - Easier to use, maintain, and extend the GPU backend
 - Only change to the default CPU backend:
 - Removed cross-references to class attributes from foreign classes
 - e.g. `tracker.voltage` → `rf_params.voltage`

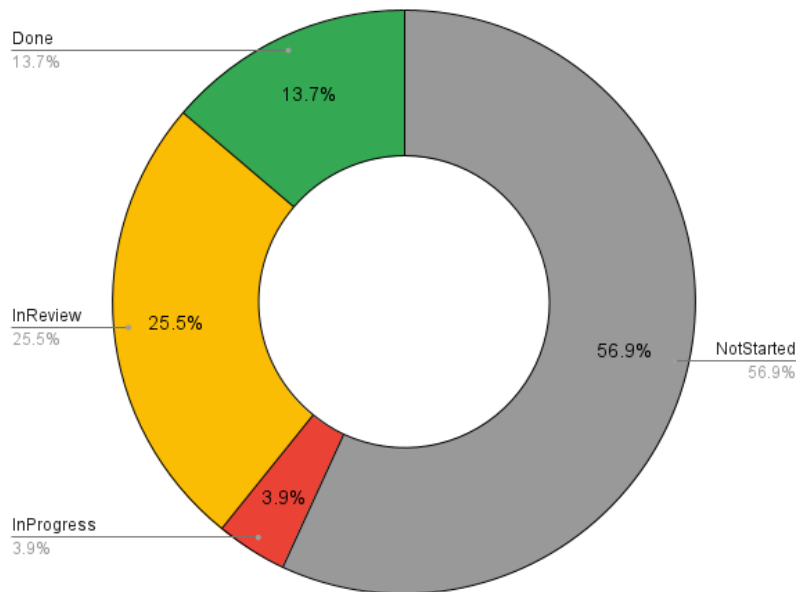
Other

- Contact by remote user (DESY)
 - Petra 4 storage rings
 - Transient beam loading, coupled bunch instability
 - Questions about cavity feedback, one-turn-delay feedback

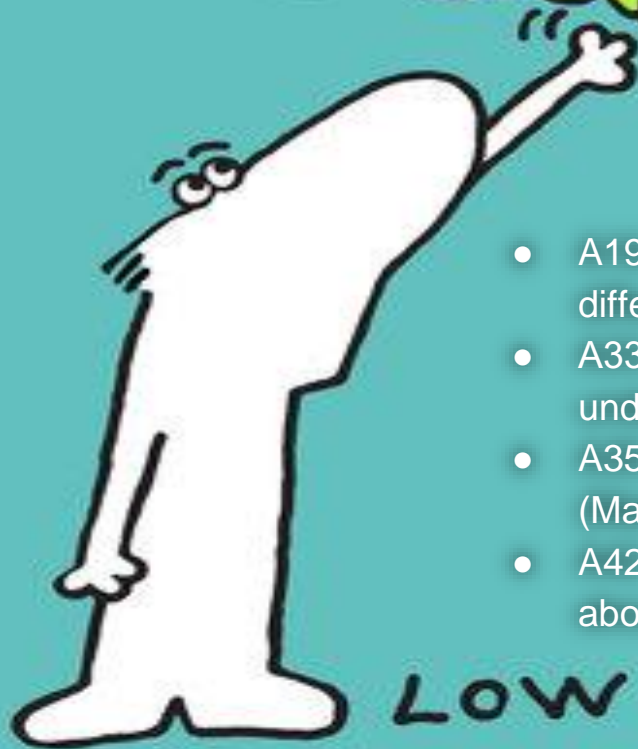
PRAB Submission

- Color-coded remarks (thanks to Alex)
 - Red: Todo/ In-progress
 - Yellow: Requires review
 - Green: Done
 - Grey: Not started
- A fully answered remark:
 1. Manuscript modification/ addition (with blue font)
 2. Answer to the reviewer.
 3. Reference to location of the modification in the manuscript (Section, paragraph)

Rebuttal letter progress (51 remarks in total)



Fruits of the day fortnight



- A19: The dimensions of the left side and right side of equation (7) are different. Needs to be corrected. (Simon)
- A33: (Synchrotron radiation) The 'empty rf station' is difficult to understand, clarify better. (Ivan, Alice)
- A35: Reference study of the feedback model and the real machine. (Markus)
- A42 & B2: Reference new Melody paper, provide more explanation about Fig. 13 (Ivan, Leandro)

LOW HANGING FRUIT