

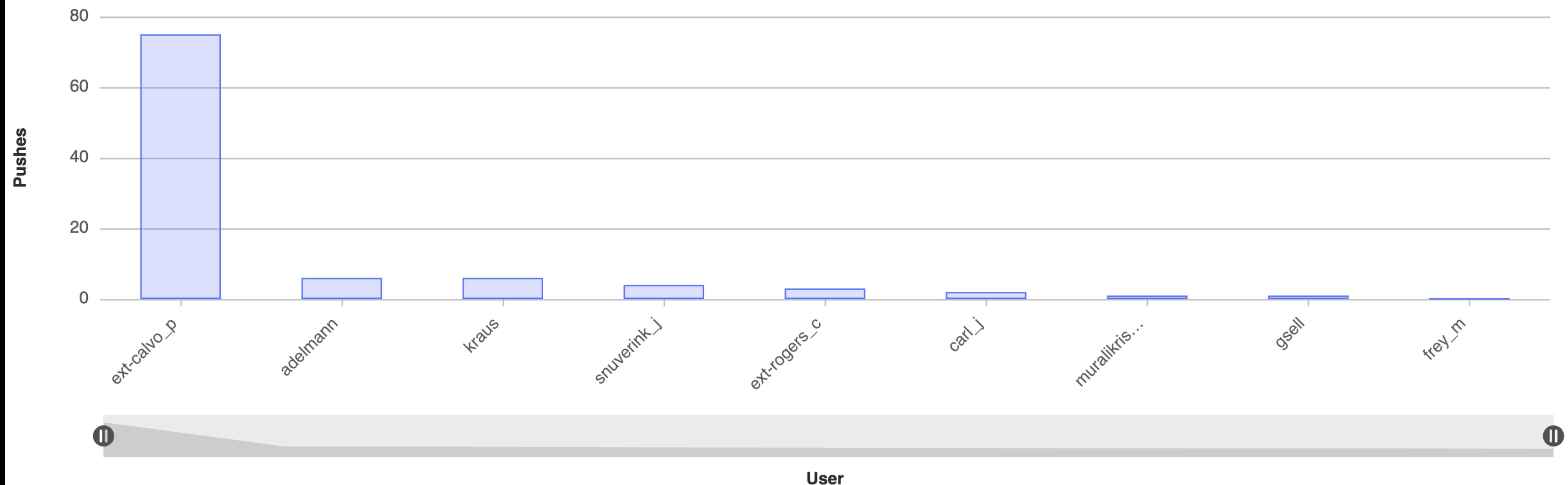
# Virtual OPAL Developer Meeting 2022 June - Introduction

Contribution analytics for issues, merge requests and push events since 2022-03-17



## Pushes

98 pushes, more than **398.0** commits by **8 people** contributors.



# Content

1. Updates OPAL (S Muralikrishnan for A Adelmann)
2. Updates on IPPL V 2.x (S Muralikrishnan)
3. pyOPAL (Ch Rogers)
4. 2022 releases (A Gsell)
5. Pressing open issues (all)

# Updates

- \* 94 99 member in the active mailing list ([opal@lists.psi.ch](mailto:opal@lists.psi.ch))

# At present the focus in large is on:

- continue consolidation & code cleanup
- working on bugfixes / feature requests
  - 12 15 bugs 20 19 feature requests

\* delayed OPAL paper



# Current projects - 1

 P3M in OPAL (IPPL 1.0) (Sri & AA)

- IPPL 2.x (Sri & Matthias)

✓ paper submitted CPC (<https://arxiv.org/abs/2205.11052>)

- Ch Rogers
  - FFA modeling (Ring element)
  - pyOPAL
- Sri & AA + MSc student
  - SwissFEL modeling
  - 2 new students for fall semester 2022 (load-balancing, full maxwell solver)

# Current projects - 2

- Prepare OPAL for IPPL 2.x (AA)
  - ✓ adapt cmake such that IPPL is an external library
  - ✓ header file adaption
- Volunteer for replacing **Tensor** and/in **Quaternion** class

The screenshot shows a web page for the Boost C++ Libraries. At the top, there's a green banner with the Boost logo and a note about old documentation. Below the banner, the title "QVM: Quaternions, Vectors, Matrices" is displayed in large, bold, black font. Underneath the title, there's a section titled "Quaternions, Vectors, Matrices". A snippet of code is shown, defining generic types `quat`, `vec`, and `mat`. The code snippet includes a comment explaining that it creates a quaternion object that rotates around the X axis.

This is the documentation for an old version of boost. Click here for the latest Boost documentation.

“...one of the most highly regarded and expertly designed  
— Herb Sutter and Andrei Alexandrescu

## QVM: Quaternions, Vectors, Matrices

### Quaternions, Vectors, Matrices

```
Out of the box Boost QVM defines generic yet simple quat, vec and mat types. For example, the following snippet creates a quaternion object that rotates around the X axis:
```