**FEL2022** 



Contribution ID: 15 Contribution code: MOP56

Type: Contributed Poster

## **Improvement of XFEL Brightness at PAL-XFEL**

Monday, 22 August 2022 17:10 (20 minutes)

We (PAL-XFEL) have improved the PAL-XFEL performances remarkably since the user-service operation in 2017. We achieved the self-seeded XFEL with a peak brightness of  $3.2 \times 10^{35}$ , the highest to date, and reached a SASE FEL intensity of 3.2 mJ due to the improved beam emittance of 0.3 mm-mrad. The statistics of the SASE FEL intensities over the past three years show that the SASE FEL performance is critically dependent on the injector emittance.

## I have read and accept the Privacy Policy Statement

Yes

**Primary authors:** KANG, Heung-Sik (Pohang Accelerator Laboratory); KANG, Teyoun (Pohang Accelerator Laboratory)

**Presenter:** KANG, Teyoun (Pohang Accelerator Laboratory)

Session Classification: Monday posters

Track Classification: SASE FEL