



BELLE II MONTHLY

April + May 2026 Edition



Your friendly monthly digest keeping the Belle II Community connected.

State of the Experiment

Following the April 15 maintenance day, the experiment collected 27.3 fb^{-1} in off-resonance running. Data-taking efficiency remains high ($\sim 90\%$), with typical daily luminosities around 2.5 fb^{-1} and peaks up to 3.4 fb^{-1} . On April 27 and 30, the machine switched to a reduced β^*_y of 0.9 mm for HER and LER to improve performance. This configuration, motivated by earlier observations of higher specific luminosity, is expected to provide a $\sim 10\%$ gain and help reach the 1 ab^{-1} goal by the end of June. Initial operation with the new optics is promising, with stable running achieved on May 3, but also remains challenging. Higher LER storage backgrounds are currently limiting performance, and further tuning is ongoing. During Golden Week, the focus is on gaining experience with the new optics and evaluating whether to continue with $\beta^*_y = 0.9 \text{ mm}$ or revert to 1.0 mm. Overall, the detector continues to perform well under increasingly demanding operating conditions, with some subsystems operating close to their limits due to the higher than expected backgrounds (e.g. increased TOP deadtime and CDC currents). The experiment has now accumulated a total integrated luminosity of 786.7 fb^{-1} .

Belle II International Masterclasses

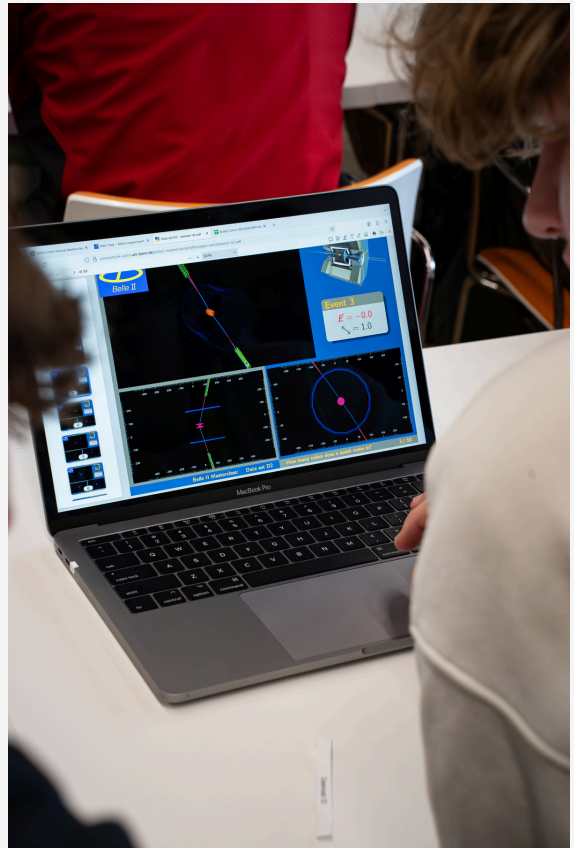
March is the month of the International Master Classes. This year, 12 institutes from different countries invited in total around 400 school students to join a Belle II International Master Class (IMC) on three different dates.

On March 12, 2026 the IMCs took place at the Max-Planck-Institute for Physics and LMU Munich in Garching (DE), at the MBI in Vienna (AT), at the IPHC in Straßbourg (FRA), and at the JSI in Maribor (SLO). On March 17, Masterclasses at the INFN in Padova and Napoli (IT), the IPNP in Prague (CZ), the JSI in Ljubljana (SLO), and the A. Alikhanyan National Laboratory in Erevan (ARM) followed. The last date was March, 25 with Masterclasses at INFN in Rome (IT), IFJ PAN in Krakow (PL) and at the Iowa State University in Ames (USA).



Welcoming about 70 students to the Belle II International Masterclass at the Max-Planck-Institute for Physics and LMU Munich in Garching (DE). Photo: Veronika Kratzer

A typical Master Class is a mixture of lectures and exercises. During the day, the pupils learn about the Standard Model, the physics of Belle II, the detector itself and also basics of data analysis. Later in the day they get to do one of two practical exercises where they analyse Belle II data. The first exercise is about the reconstruction of B mesons. In the second exercise the students are asked to categorize events and determine the number of quark colors. Finally, there is a moderated video call to KEK and the other Master Classes of the day where students can volunteer to present and compare their results and talk to a scientist in the Belle II control room.



Students classifying events in order to determine the number of quark colors (MPI Garching). Photo: Veronika Kratzer

Special thanks to Rok Pestotnik who coordinated and organised the International Master Classes. We also thank the local organizers and the people involved in the video call to KEK. The events were, again, a big success and a good investment in the future of physics and our field.

DPG Spring Meeting 2026

From March 16-20, 2026 the yearly DPG (Deutsche Physikalische Gesellschaft; German Physical Society) spring meeting of the section matter and cosmos (SMuK) took place at the Friedrich-Alexander University in Erlangen.



About 2000 physicists from German institutes gathered to share their research, learn about the work of others, discuss their results and socialize during coffee breaks and in the evenings. They work in the field of elementary particles, but also in astroparticle physics, extraterrestrial physics, gravitational physics, relativistic astrophysics, cosmology, hadronic and nuclear physics, plasma physics, radiation and medical physics, or theoretical and mathematical physics. The other areas of physics are covered in two more meetings which also happened in March.

Banner of the Deutsche Physikalische Gesellschaft (DPG) in front of the Audimax Building of the Friedrich-Alexander-Universität in Erlangen. Photo: Daniel Heuchel

Belle II was very well represented in quite a large number of contributions in the form of posters and talks. There were more than 40 physics and technical talks as well as a talk on the outreach activities of Belle II Germany.



Outreach Talk by Veronika Kratzer at the DPG Spring Meeting 2026 in Erlangen. Photo: Daniel Heuchel

Further, Belle II Germany had a booth together with LHC Germany as part of the industry fair where people could come over to learn about the experiments, to have a chat or to grab some merch. There was also the chance to take a virtual tour through the Belle II detector and follow particles on their way through it with Belle II virtual reality experience.



Shared Booth of Belle II Germany and LHC Germany at the industry fair at the DPG spring meeting. Left: Daniel Heuchel (LHC Germany), Right: Veronika Kratzer (Belle II Germany).

Revival of the Belle II Calendars

Most of you might remember the Belle II calendar that was distributed among members until 2024. Unfortunately, there was no 2026 edition. However, we got a lot of requests to have it back.

We took those requests very seriously and there will be a new edition for 2027.

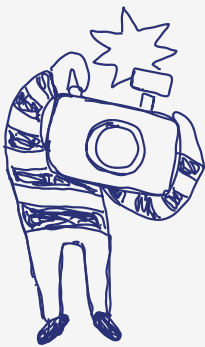
We need your help, though!

Therefore, we introduce the

Belle II Photo Contest



Send us your best, most meaningful, funniest, most interesting or most remarkable Belle II pictures.



They can cover:

- Belle II Detector/KEK site
- everyday Belle II work (at KEK or your local institute)
- events and conferences
- people/colleagues
- anything else remotely related to Belle II

Winners and Shortlist will be featured in the **2027 edition of the Belle II calendar**. There will also be additional prizes for the 1st, 2nd, and 3rd places.

[Submit here →](#)

Submission Deadline: 28.06.2026

Technical requirements:

- File format: jpg/jpeg
- File size: 2-20 MB
- high resolution*
- max. 5 images per submission/person

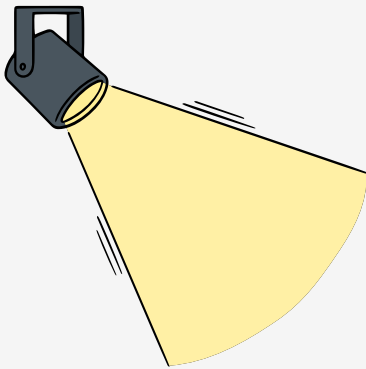
*Pictures with too little resolution to be printed in the calendar will not be considered.

By sending in the pictures you confirm that you own the rights for the picture and that no rights of others are violated. People shown in the picture are aware of the submission and the potential subsequent print in the calendar and agreed to it. Further, we reserve the right to publish all submitted photos in the Belle II and Belle II Germany social media accounts, the webpages belle2.org and belle2.de and the Belle II Monthly newsletter.

Voting for winners will take place during the 54th B2GM in Vienna from July 06.-09., 2026. Winners will be announced during the award ceremony at B2GM on Friday, July 10, 2026.

Good Luck!

We are looking forward to your submissions and to the revival of the Belle II calendar!!



March / April Physics Highlights

- Search for the $B^+ \rightarrow K^+ \tau^+ \tau^-$ decay using data from the Belle and Belle II experiments [2603.24437]
- Search for charged lepton flavor violation in $\chi_{bJ}(1P)$ meson decays [2603.10818]

All the latest publications can be found here: https://docs.belle2.org/pub_data/publications/

**Reminder: July B2GM and Belle II
& Theory Workshop in Vienna –
Registrations open**

The next **Belle II General Meeting (B2GM)** will be held from **July 6-10, 2026 in Vienna, Austria**, hosted at the Freihaus building of TU Wien.

As part of the B2GM, we will have the **upgrade workshop**, which will take place in dedicated sessions during the week, and a dedicated discussion is planned on Friday afternoon (July 10th, 14-18) after the closeout of the B2GM.

In addition, the **Belle II & Theory workshop** will take place from **July 1-3**, providing an opportunity to strengthen collaboration between experimentalists and theorists.

Please register here:

54th BELLE II
General Meeting

6th - 10th July 2026
Freihaus, TU Wien
Wiedner Hauptstr. 8-10, 1040 Wien, Austria

Follow the owls

More infos + registration: 
<https://indico.belle2.org/event/17880/>

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Workshop
Belle II & Theory

1st - 3rd July 2026
Vienna University of Technology, Austria

The Belle II & Theory workshop intends to bring together members of the Belle II experiment with the theory community at large. The program is organized jointly and covers all aspects of the Belle II physics reach. Belle II will soon enter its inverse attobarn era, pushing beyond the sensitivities of the predecessor e+e- B factory experiments.

Organisation: LOC, Soeren Prell, Florian Bernlochner

More infos and registration: 
<https://indico.belle2.org/event/17871/>

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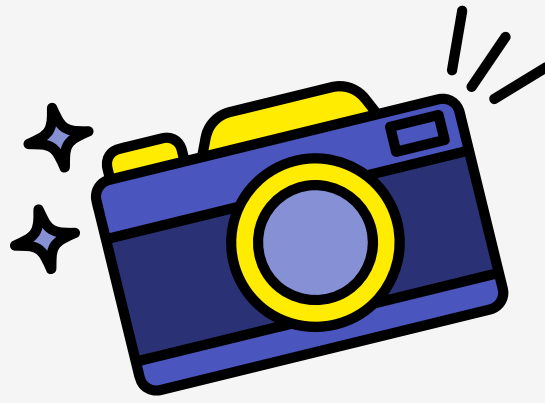


Photo of the Month



Belle II Members enjoying the hanami picnic under the cherry blossoms at KEK on April 3rd.

The picnic was held as part of the Thursday Snack Breaks, organized by Matsuoka-san and Marcela Garcia. For information about snack breaks and other activities around KEK, keep an eye on the Mattermost channel: <https://b2chat2.kek.jp/b2rc/channels/snackbreak>

Golden Week in Japan



Koi Nobori (Carp Streamers) celebrating Children's Day (5/5) are a common sight in Japan over the Golden Week holidays. Carp are a symbol of strength, perseverance and good fortune – and of baseball in Hiroshima!

Upcoming Events

Belle II Events:

- **Belle II Academy**, May 3-7 in Blaubeuren
- **F2F Tracking Meeting**, June 8-10 in Pisa
- **Belle II & Theory Workshop**, July 1-3 in Vienna
- **54th Belle II General Meeting** in Austria (registration open – separate registration for Carbon Footprint tracking – watch for details soon)
- **Summer Workshop**, July 27-31 at the University of Louisville

Conferences:

- 24th Conference on Flavor Physics & CP Violation (FPCP) in Bad Honnef; **18-22 May 2026**, Belle II will have a strong showing with several topical and overview talks.



Call for contributions!

Have news, papers, or photos to share? Email zjl@hiroshima-u.ac.jp for the next Belle II Monthly.

