

Hello everyone,

This World Wide Data Day Memo is going out to a wide group of people. If you are a teacher thinking about joining W2D2 with your students, you are quite welcome. Physicists and other friends: please reach out to physics teachers you know.

Teachers: If you have not already done so, you are invited to join W2D2, which will be held this year all day UTC on **Thursday 14th November 2024** – about three weeks away. W2D2 is a chance for high school students to make a simple but meaningful analysis of data from the LHC. *It can all be done by a teacher and students at school within about two hours, from start to finish, including the 30 minute videoconference.* Read all about it at <https://cern.ch/w2d2>. Register at <https://forms.gle/BBD65NifRtxisHnc8> from now through Monday 4th November.

These Memos will continue for those who register to help them prepare according to this schedule, within appropriate error bars:

- Wed 23 Oct - Memo 1 - and here we are
- Wed 30 Oct - Memo 2
- Wed 06 Nov - Memo 3
- Wed 13 Nov - Memo 4
- Thu 14 Nov - World Wide Data Day.

Here are some highlights from the website:

- *Homepage - Resources.* The Intro slides for the PHI and THETA measurement will be helpful in your classroom. There are two spreadsheets. The "Local Google Sheet 2024" is for your class. The teacher can make a copy of this and share with students to record the results from their tally sheets. The "Worldwide Google Sheet 2024" for teachers to report class results should be ready in about a week. You do not need to use the Local sheet - you can collect results from students and make class histograms or collect results as you decide. However, you must report class results on the Worldwide sheet.
- *ATLAS and CMS pages.* We have two screencasts for students on each of these pages. The first presents an overview of W2D2 based on the Intro slides and the second is a step-by-step procedure for making the measurement. All students (and teachers!) should view these screencasts.

Finally, we will have two **Q&A zoom sessions** for teachers to ask any questions and discuss the measurements on **Thursday 07 November at 15:00 UTC and 22:00 UTC**. (To convert to your time zone, try the [timeanddate Time Zone Converter](#).) Until then, please email us your questions!

All the best,

Ken Cecire and Shane Wood
QuarkNet Staff, W2D2 Coordinators