QuarkNet Data Camp, Coding Camps 1 & 2

Common to All 3 Camps

One week of intensive, collaborative learning.

- **1st half in 'student' role: Analyze CMS Run 1 data.**
- **2nd half in 'teacher' role: develop lessons and plans.**

24 Teachers with a range of experiences, QNet involvement.

Spreadsheets, Python, & Data Activities Portfolio.

Talks and tours.

And networking with other teachers.

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Camps have Unique Goals

Data Camp (at Fermilab)

- HEP content and calculations.
- Good 1st big workshop to attend.

Coding Camp 1 (virtual)

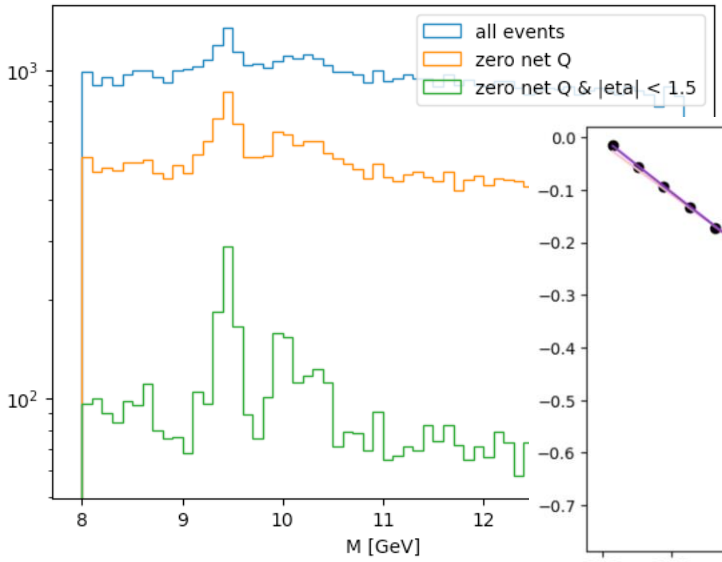
- Develops comfort using existing coding activities.
- HEP is the context; also use other data sources.

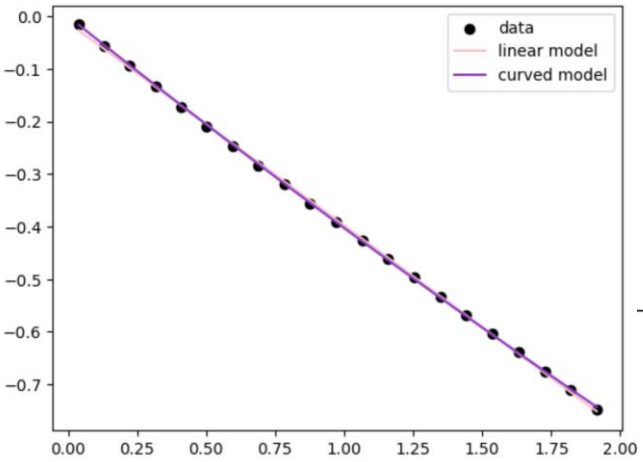
Coding Camp 2 (at Fermilab, w/IRIS-HEP funding)

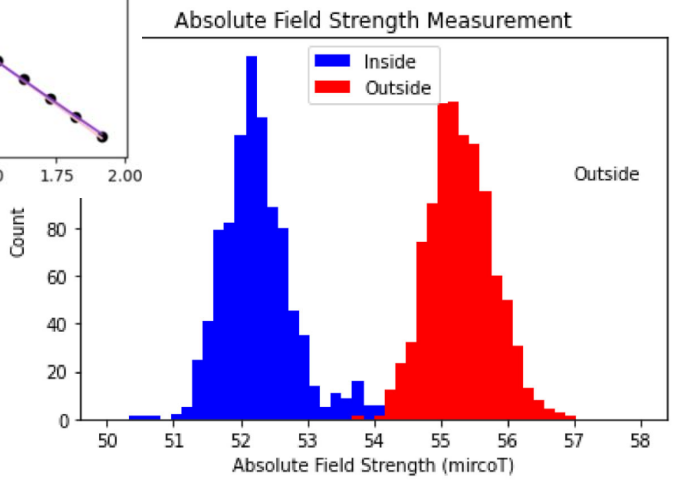
- More advanced python analysis and visualization.
- Users of coding activities become developers.

QuarkNet

Teachers Coding







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Hidden Benefits of the Camps

Structure models reformed pedagogy.

Participants learn much from each other.

Builds an international community of educators.

Camps are run by fellows.

- **Trains the next generation of teacher leaders.**
- **A 'meta' experience of teaching teachers.**

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Next Steps

Further differentiate which CMS analyses are done in which camps.

Pursue solutions beyond Google Colab.

Grow the pool of fellows

Finding new HEP data to address physics content