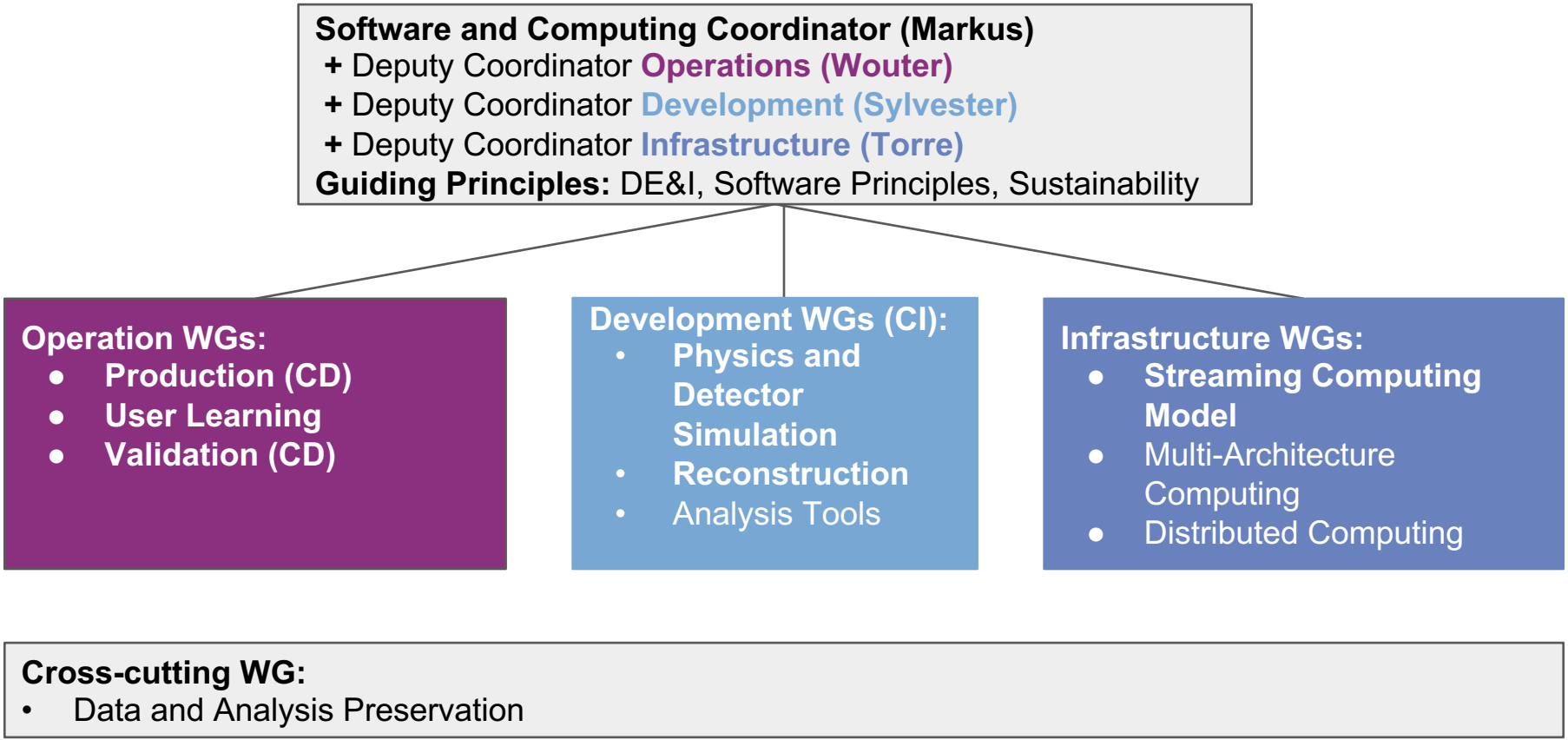
Software and Computing Coordinator (Markus)
+ Deputy Coordinator Operations (Wouter)
+ Deputy Coordinator Development (Sylvester)
+ Deputy Coordinator Infrastructure (Torre)
Guiding Principles: DE&I, Software Principles, Sustainability
Operation WGs:
Production (CD)
User Learning
Validation (CD)
Development WGs (CI):
Physics and Detector Simulation
Reconstruction
Analysis Tools
Infrastructure WGs:
Streaming Computing Model
Multi-Architecture Computing
Distributed Computing
Cross-cutting WG:
Data and Analysis Preservation

Validation WG

- **Conveners**: **Torri Jeske** (roark@jlab.org) and **Dmitry Kalinkin** (dmitry.kalinkin@gmail.com)
- **Charge**: Responsible for the validation of the simulations via a suite of detector and physics performance plots. Develop autonomous checks and verification of the validation plots.
- **Priorities for 2023**
  - Implement and document our Simulation Production Strategy, together with Production WG.
  - Develop and maintain a **collection of plots that showcase** the performance of the ePIC detector, its **physics reach**, and enable comparison to a baseline or previous simulation campaigns.
  - Drive the development of unit tests for the ePIC software, together with the Development WGs.

Request for Physics Benchmarks

We are **asking you, the Physics WGs, for help**:

- **Define plots** that showcase the physics reach of the ePIC detector.
- **Provide the physics analyses** to generate the plots.

What is the **purpose of these plots**:

- Showcase the measurement capabilities of the ePIC detector in a specific design.
- Verify our ability to carry out the EIC Science Program as outlined in the NAS report.
- Compare between detector designs:
  - The measurement capability, e.g., our reach in low *t*, is a driver for the design.

What are you asking for exactly?

Physics analysis refers to a **Python script** or **ROOT macro**:

- **Input ***: ePIC simulations files, i.e. the output of the monthly simulation campaigns.
- **Output**: A plot or a collection of plots.

Please send this information to **Torri** (roark@jlab.org) and **Dmitry** (dmitry.kalinkin@gmail.com).

What we are **NOT** asking for:

- We are not any specifics (yet) on the Python script or ROOT macro.
- You don't have to have to consider any details on the detector design, the detector simulations, or the reconstruction. The physics benchmarks will run on standardized output of the simulation campaigns.
- You don't have to integrate the physics benchmarks in the simulation campaigns. The Validation WG will take about this. Right now, this is not (yet) automated.

***** In some cases, it might be needed to add MC files for a specific physics simulation.

Our Request for Physics Benchmarks

- In need of macros that just generate histogram(s) from EDM4eic files.
- Example from Jets & HF WG:
  - Uses RDataFrame, nice but not mandatory at this point.