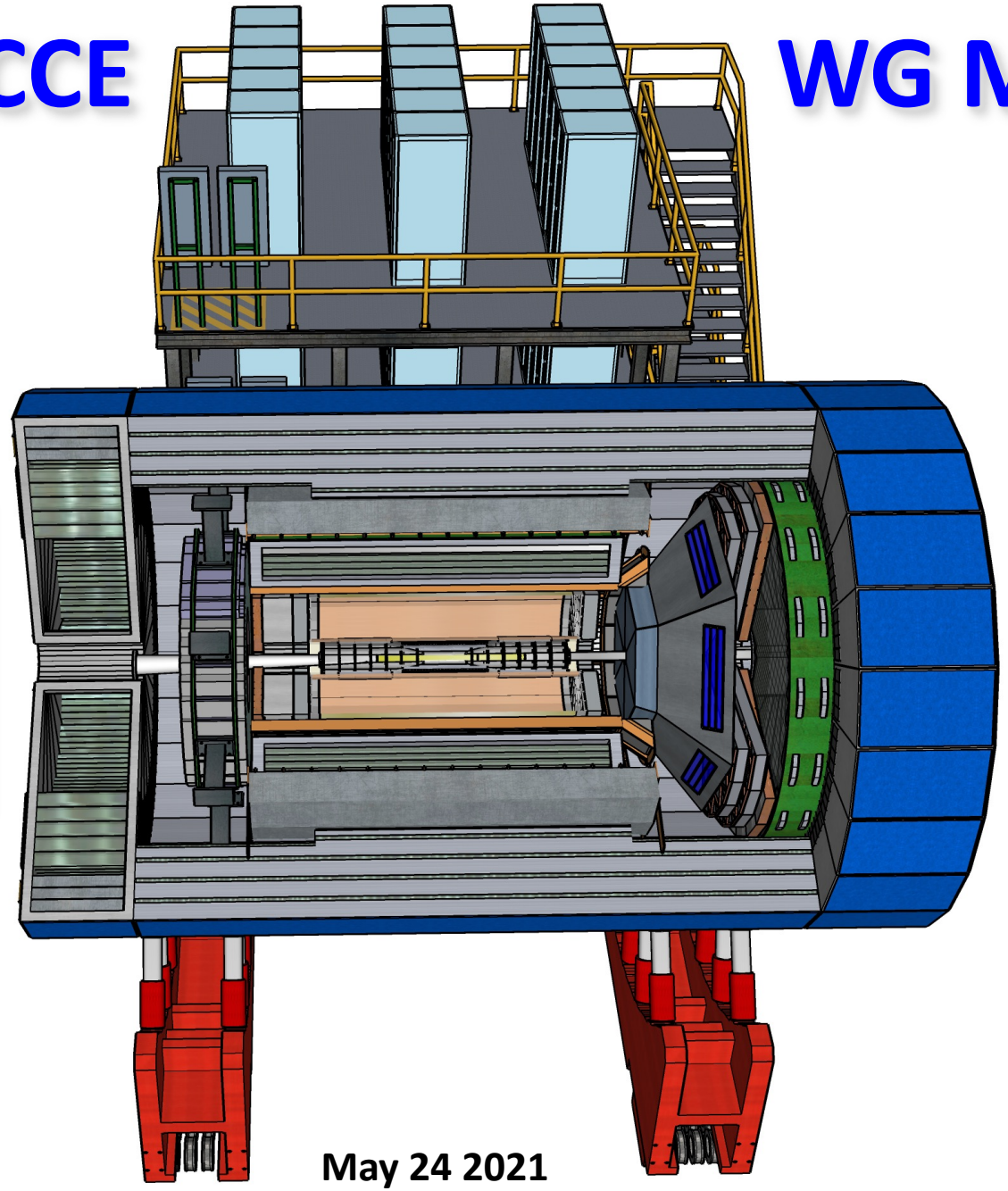
PID@ECCE WG Meeting

Greg Kalicy — CUA

Xiaochun He — Georgia State University



- PID WG meetings
- Technologies and configuration
- Fun4All Simulations
- Schedule

May 24 2021

PID@ECCE

Meetings:

- **Bi-weekly (https://doodle.com/poll/qk25pb2sh6buimdd) + ad-hock called meetings when needed**
- **At least once per month joined meetings with Tracking WG**

Documentation:

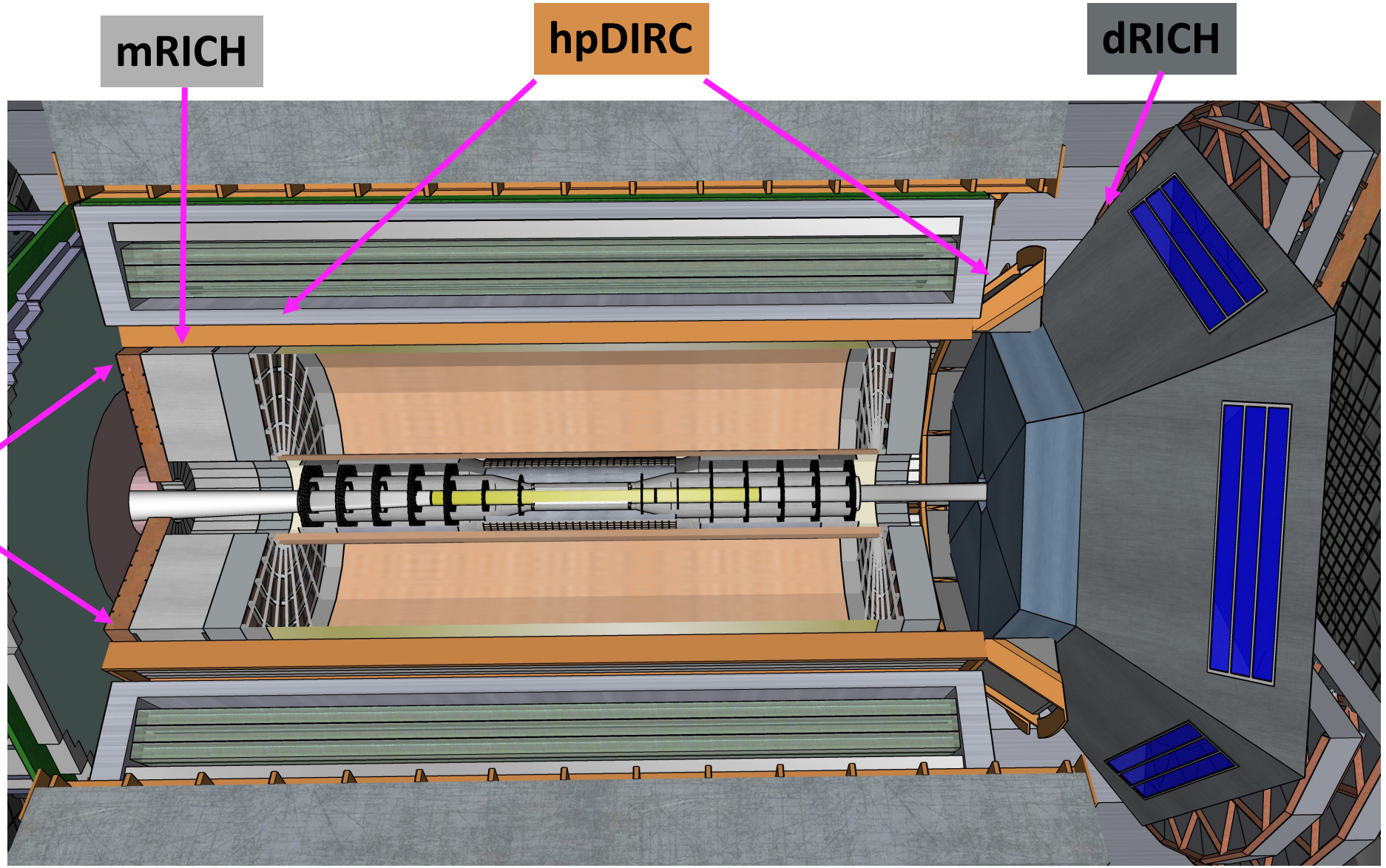
- **Wiki with basic info, meetings, and links: https://wiki.bnl.gov/eicug/index.php/ECCE_Detector#ECCE_Particle_ID**

Porting PID systems to ECCE fun4all (May 19th, 20th):

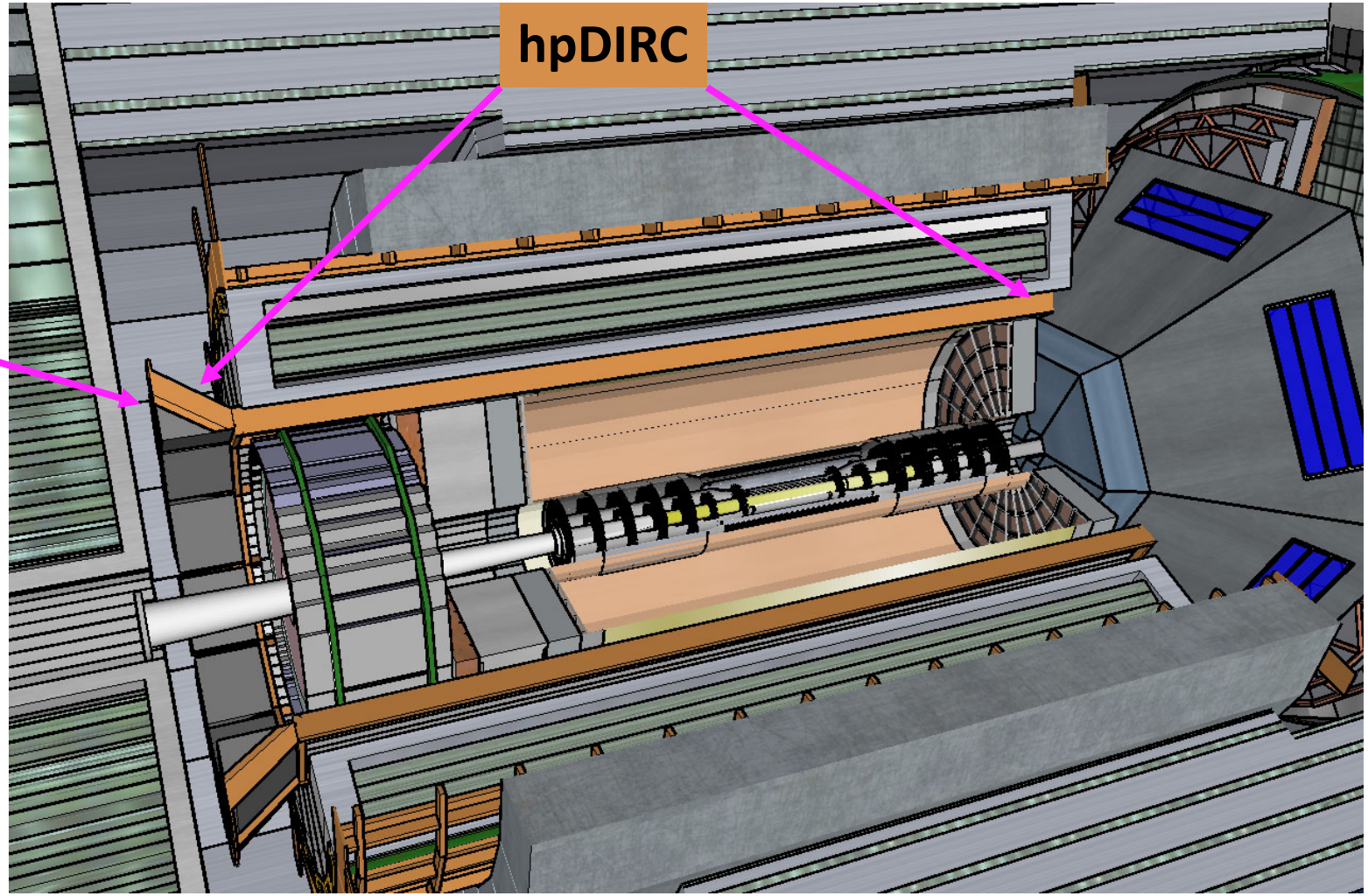
- **mRICH** - already implemented, perfect as template! (Murad Sarsour)
- **TOF** – already implemented. (Wei Li)
- **dRICH** – in progress, active help from Evaristo! (Christopher Dilks, Sebastian Tapia, Cristiano Feneli)
- **hpDIRC –** in progress, active help from Chris Pinkenburg! (Nilanga Wickramaarachchi, Roman Dzhygadlo)

Optimization with machine learning (Cristiano Fenelli)

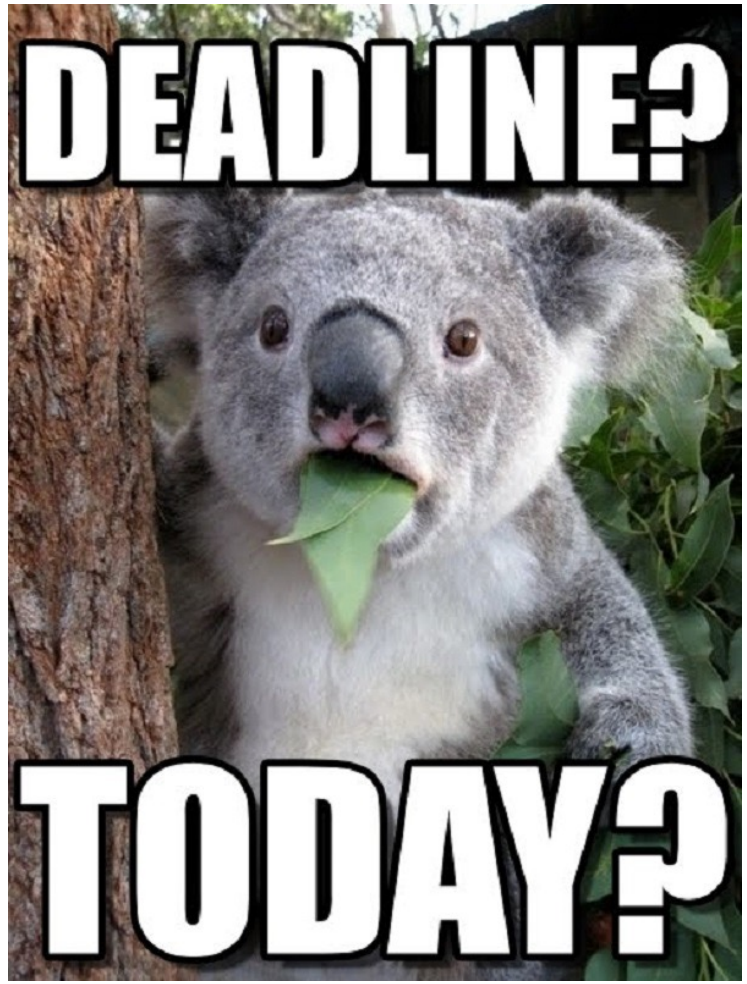
1.5T Magnet Detector in SketchUp



DIRC Prism on Electron Side



Moving Forward

- **PRELIMINARY Deadlines:**

1. **June 1st - Technologies and configurations recognition**
2. **June 15th - Preliminary evaluation (stand alone simulation, advancement of R&D)**
3. **June 29th - ECCE Fun4All implementation**
4. **July 27th - Physics capability with PID validation**
5. **August 31st - Fine-tuning of geometries and locations**
6. **September 28th - Final Evaluation**
7. **October 26th - Proposal writing**