New Institutions from Sept. 2019 Meeting

- James Battat, Wellesley College
  - Near term: APA Consortium quality control/assurance – high-throughput wire tension measurement (close coordination with Harvard group)
- Xiao Luo, UC Santa Barbara (former Yale postdoc on μBooNE, DUNE)

Near Detector:
- LArTPC pixel readout electronics test
- MPD design and construction

Xe-doping:
- LUKE & ICEBERG tests at PAB
- ProtoDUNE test at CERN
- Synergy with the UCSB LZ colleague – robust R&D lab of Ar/Xe mixture at UCSB

Physics interests:
- DUNE Oscillation analysis <- uB expertise on event reco. and ν_μ/ν_e analysis
- Low energy physics in DUNE . e.g. solar neutrinos, supernova neutrinos @ far detector, exotic physics @ near detector, etc.

New Institutions from Sept. 2019 Meeting

- Andy Mastbaum, Rutgers University (former UChicago postdoc on SNO+, SBND, MicroBooNE)
  - Proposed Contributions:

- **Instrumentation & DAQ**
  - Common DAQ and readout development for the ND LArTPC and HPgTPC
  - Online Monitoring development (building on SBN monitoring tools)
  - Leverages Rutgers computing and detector instrumentation capabilities, including an electronics design engineer, an electronics shop, and a machine shop and engineering staff
- **Oscillation Analysis**
  - Development of ND LArSoft simulation (building on SBN expertise)
  - Development of systematics model (building on SBN, MicroBooNE)
- **BSM Searches**
  - Extensions of SBN BSM (e.g. DM) searches to the DUNE ND
  - Collaborate with the Rutgers theory and CMS groups to develop novel BSM searches, explore joint searches with collider measurements

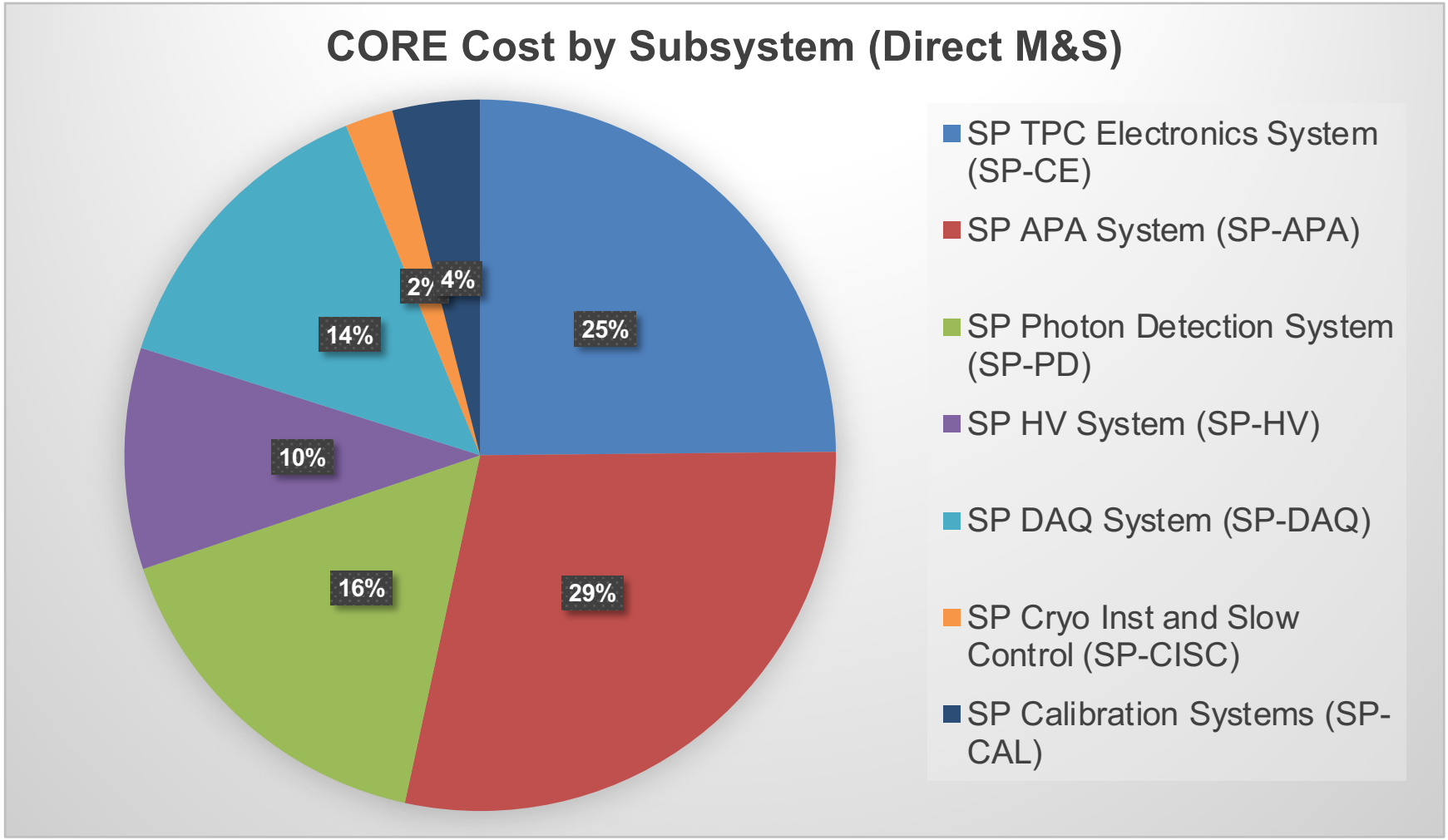
New Institutions from Sept. 2019 Meeting

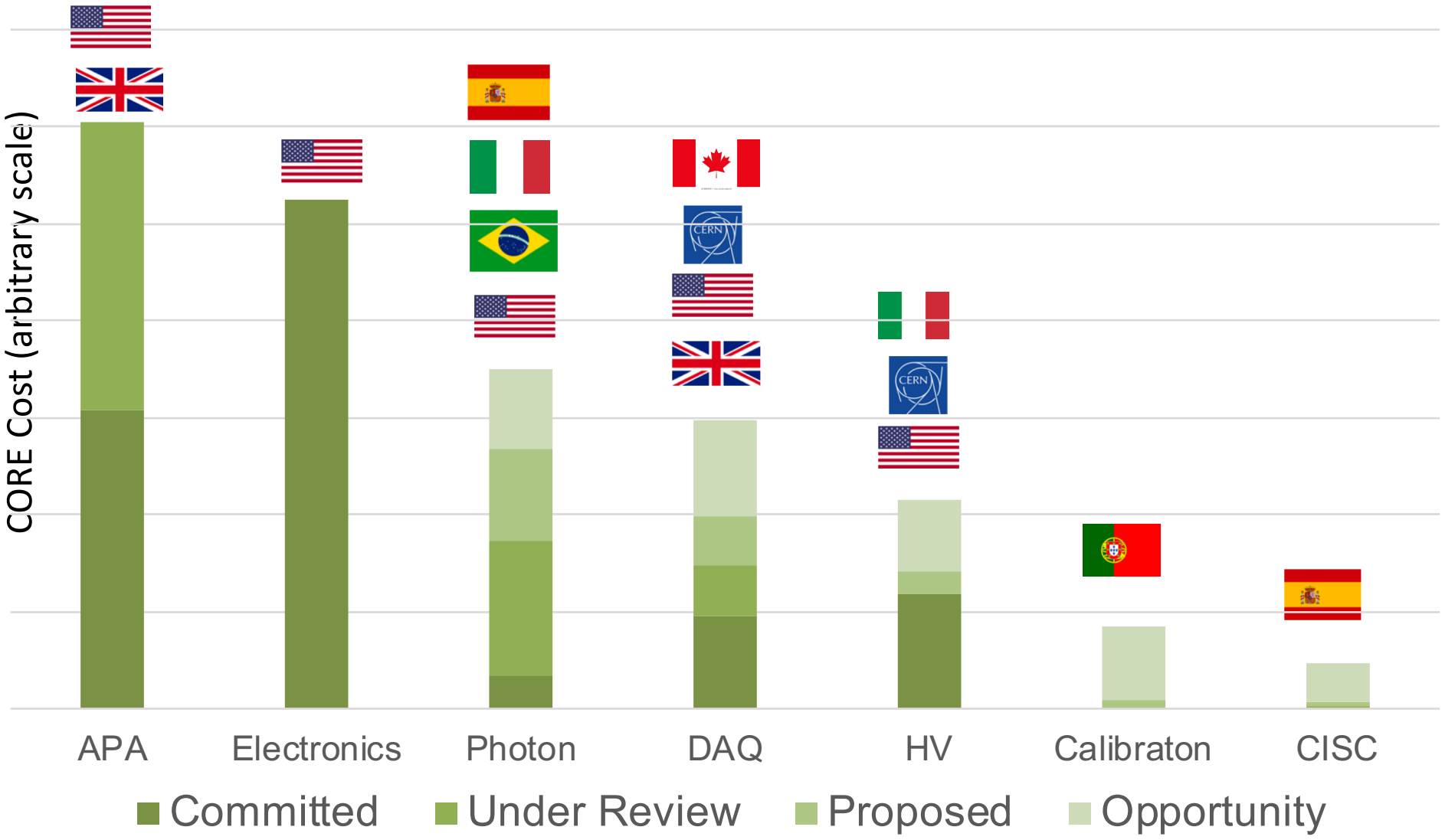
- Nikolina Ilic, University of Toronto (also works on ATLAS)
  - Group interests:

- Hardware
  - Development of DAQ & FELIX on DUNE
  - Optimization of trigger primitives & supernova buffering in the readout
  - Continued commissioning of DAQ with ProtoDUNE
  - Installation of FELIX in DUNE
- Physics
  - Sterile Neutrino searches & non-standard interactions
  - Optimization of tau neutrino sensitivity with atmospheric & beam neutrinos

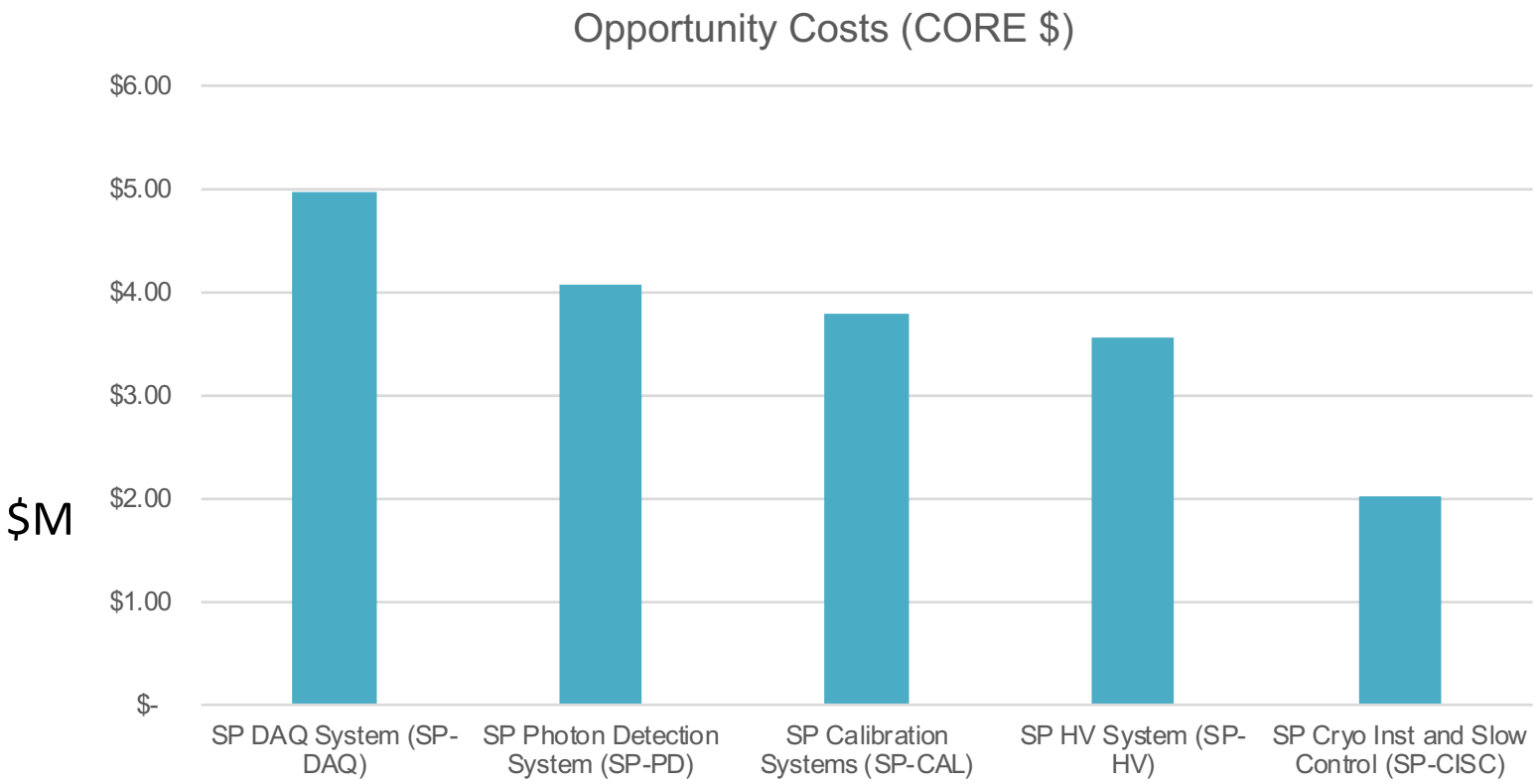
2 Single Phase Detectors

Preliminary Estimate : $106M




CORE Cost (arbitrary scale)
APA
Electronics
Photon
DAQ
HV
Calibraton
CISC
Committed
Under Review
Proposed
Opportunity

Funding needed to complete 2 modules



Developing action plans for each of these systems

"CORE" is a realistic target since designs are complete

Good systems for smaller countries/institutions to contribute