# UMass, Amherst Group & SBS

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SBS Collaboration Meeting July 14 2020

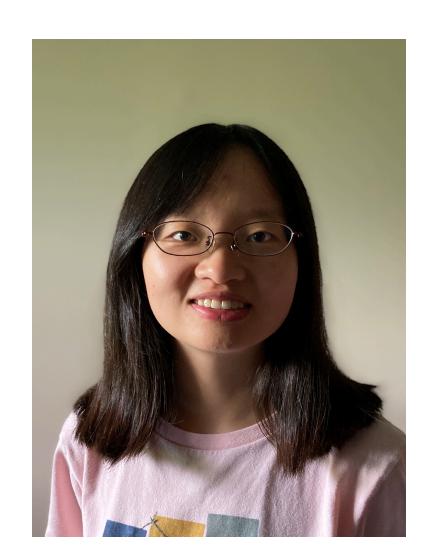
### Group Personnel & Activities

- KK (PI) moved from SBU to UMass in January 2019
  - New funding in place from DOE MEP
  - primary activities are the PVES program (current and future), SBS (scope of work is at the level of 10-15% effort of group as a whole) and some EIC investigations
- Group is a mixture of personnel from SBU and UMass
  - · 3 SBU grad students, all set to graduate by Summer 2021
  - · 2 postdocs (Chandan Ghosh and Hanjie Liu)
  - · 2 new incoming UMass graduate students (possible candidates for SBS theses)
  - 1 postdoc on a different funding stream (Jason Bane); possible small participation during SBS running

## Vision for SBS Participation

- Installation Phase (roughly 12 months)
  - Two postdocs and one grad. student at a total of about 1 month of effort each
  - next slide from Nilanga articulates two specific tasks for the postdocs
  - · one student (Tao Ye) is local and can participate in installation tasks
- Commissioning and First Year Running
  - Two postdocs to participate at a level to be determined based on other commitments
  - Hope to start participating in some offline analysis tasks
- Second Year Running onwards
  - · Postdocs participation during running as well as offline analysis
  - hope to have at least one graduate student do a dissertation topic on SBS

Chandan



Hanjie

#### Urgently needed post-doc level tasks for UVa SBS GEMs

- Someone to be the coordinator for the local shielding huts to house GEM electronics near each spectrometer for each setup (Kondo has already started and done a lot of work on this with Jlab designers but need someone to take over):
  - Gather the needs (how many racks, crates, cooling, # of readout cables, HV cables, gas lines etc.) and how close to the spectrometer etc. information from the UVa group.
  - Coordinate with the designers on getting the designs for the huts and cable routing schemes for each setting.
  - Organize meetings to include GEM group and designers and iterate as needed.
  - Present plans at SBS collaboration meetings.
  - Coordinate with designers and Hall A tech staff on the assembly of huts, time schedules etc.
  - Coordinate with Electronics experts on gathering the units to be housed.
  - During installation, coordinate the installations of racks, crates, units etc., connections of cables and gas lines in the huts.
- Someone to be the coordinator of the GEM DAQ system as part of the final BB DAQ system to setup in the Test-lab for the BB setup which will eventually be moved into the Hall (Danning has already done a lot of this work: need someone to take over)
  - Coordinate with GEM experts and DAQ experts to come up with schematic drawings of needed setup.
  - Take inventories, make sure all components are available in needed quantities (components include, but not limited to, MPD units, optical cables, transceivers, SSPs, VME/VXS, crates, racks, cooling, cable trays, etc. etc.)
  - Coordinate (i.e. ask nicely, write repeated emails, put pressure on etc) on people like AC and MJ to get the missing items orders on time; (also coordinate that when these items arrive, they are stored in safe locations.
  - During installation in test-lab, work with and/or help as needed electronics experts on getting the DAQ setup installed, finalized and tested
  - Work with work with and/or help as needed GEM experts connect the GEMs to DAQ, test with GEM data and commission.

GEM experts: NL (Liyanage), KG (Gnanvo), XB (Bai); Electronics experts: AC (Camsonne), BR (Raydo), BM (Mofitt), BibBite Project coordinator: MJ (Jones)