Closing of CSCS2018

Shusu Shi & You Zhou

CSCS2017 -> CSCS2018

❖ Topic of collectivity in small systems becomes hotter and hotter

- attendance increase by a factor of 2

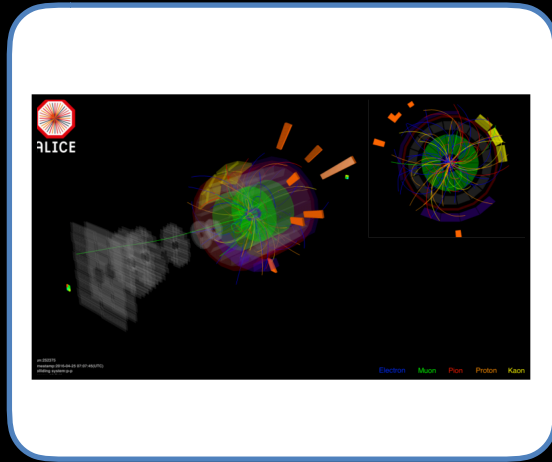# CSCS2017 -> CSCS2018

❖ Topic of collectivity in small systems becomes hotter and hotter

- Attendance becomes younger (attendance of young physicists is crucial for the entire field!)
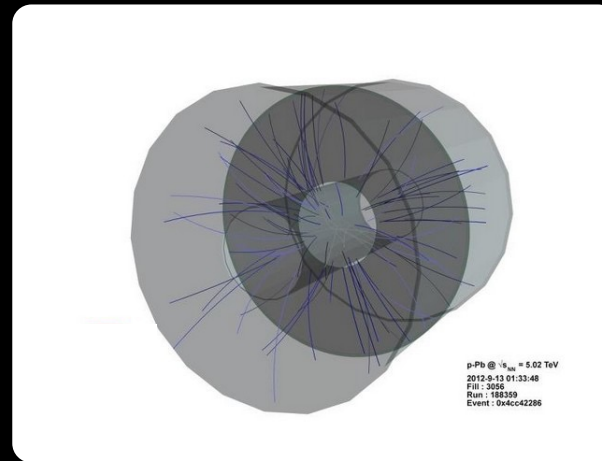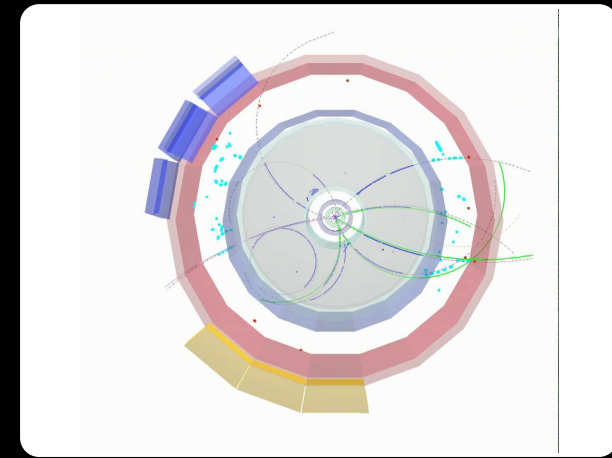
"Small" systems at LHC

Xe-Xe collisions

p-Pb collisions

pp collisions

- 5.44 TeV

- 5.02 TeV
- 8.16 TeV

- 900 GeV
- 2.76 TeV
- 5.02 TeV
- 7 TeV
- 8 TeV
- 13 TeV

"Small" systems at RHIC

$\sqrt{s}$ [GeV]	p+p	p+Al	p+Au	d+Au	3He+Au	Cu+Cu	Cu+Au	Au+Au	U+U
510	✓								
200	✓	✓	✓	✓	✓	✓	✓	✓	✓
130								✓	
62.4	✓			✓	✓			✓	
39				✓				✓	
27								✓	
20				✓	✓			✓	
14.5								✓	
7.7								✓	

From R. Belmont @ QM18

What we learn from this workshop? What are the open questions?
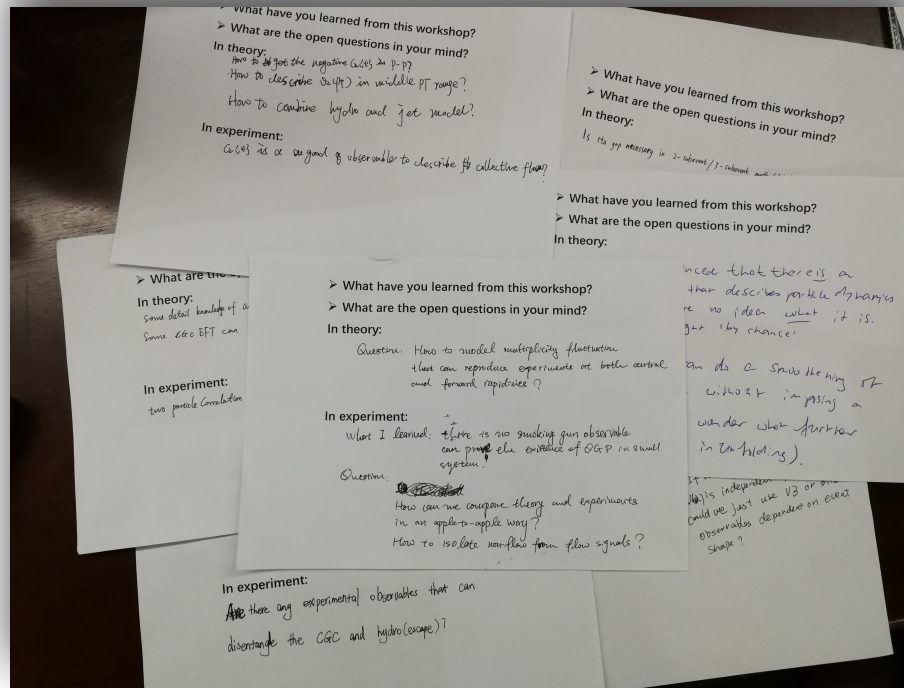
This slide will be updated after collecting all responses

What we saw in this workshop

❖ Evidence of collectivity in small systems, in pp, p-Pb, d-Au, ³He-Au
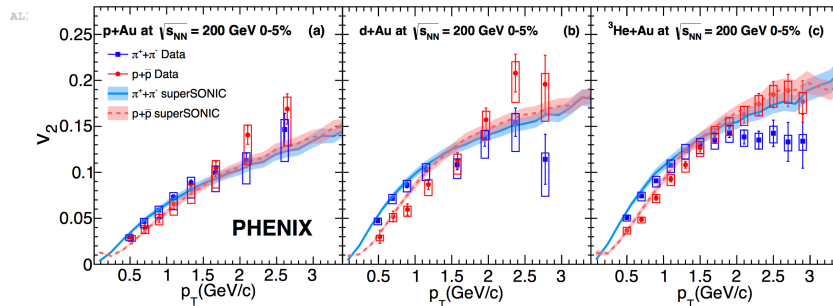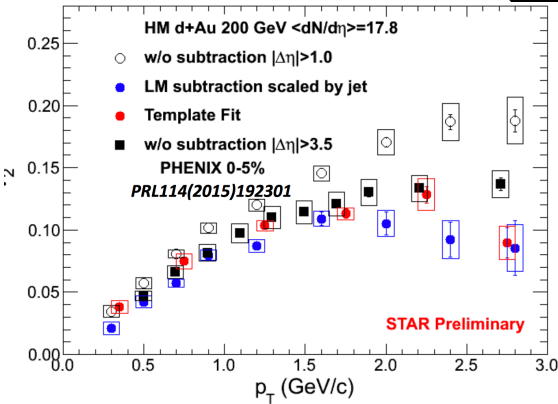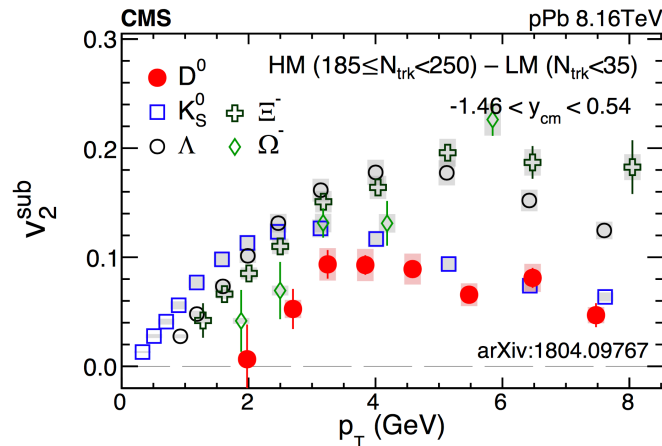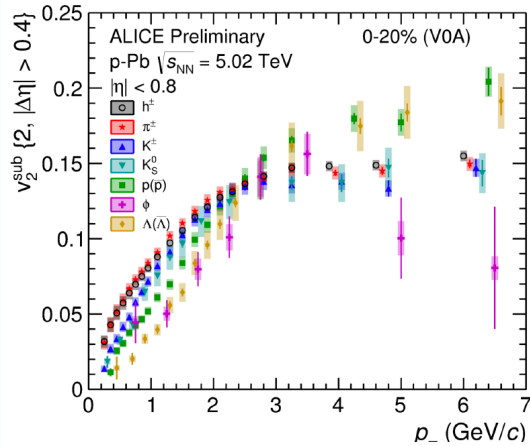
- Latest results reports by ALICE, ATLAS, CMS, LHCb, PHENIX, STAR
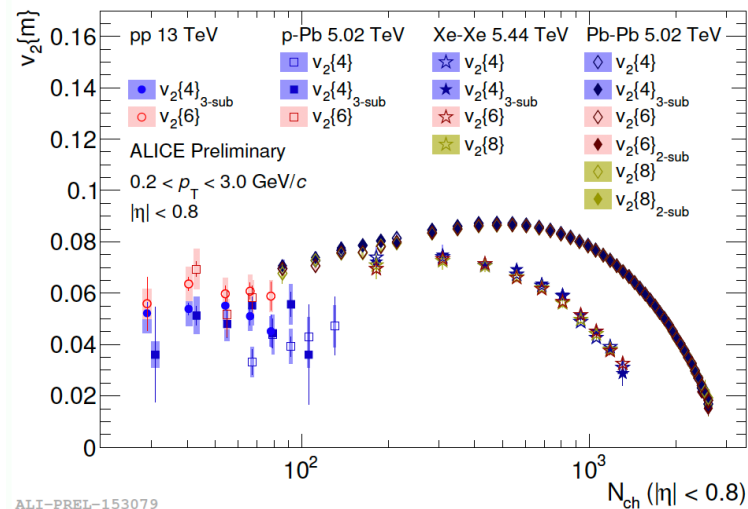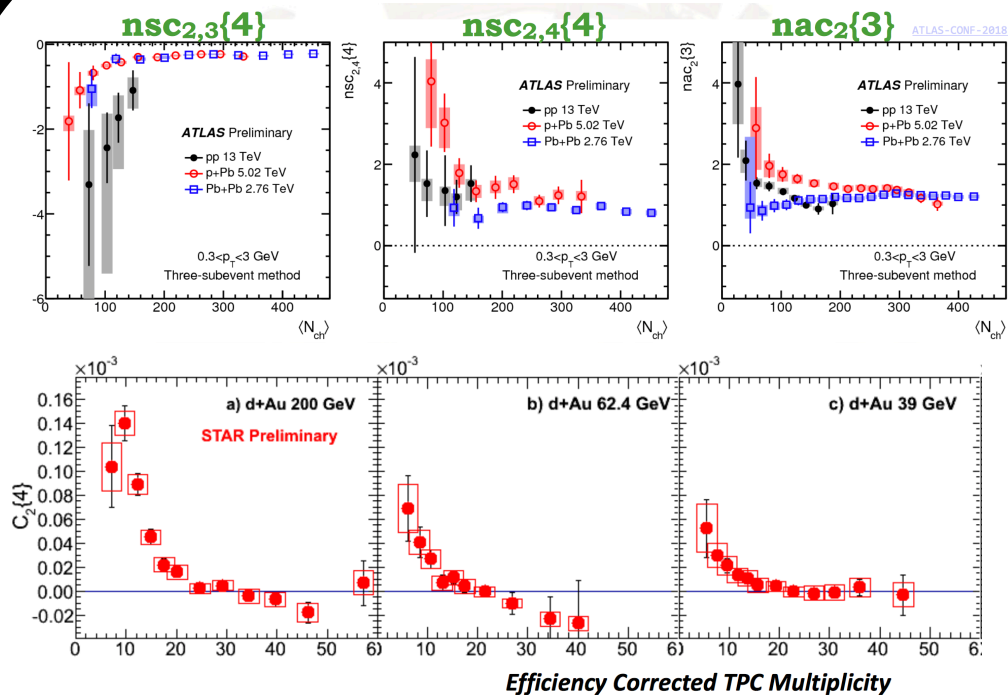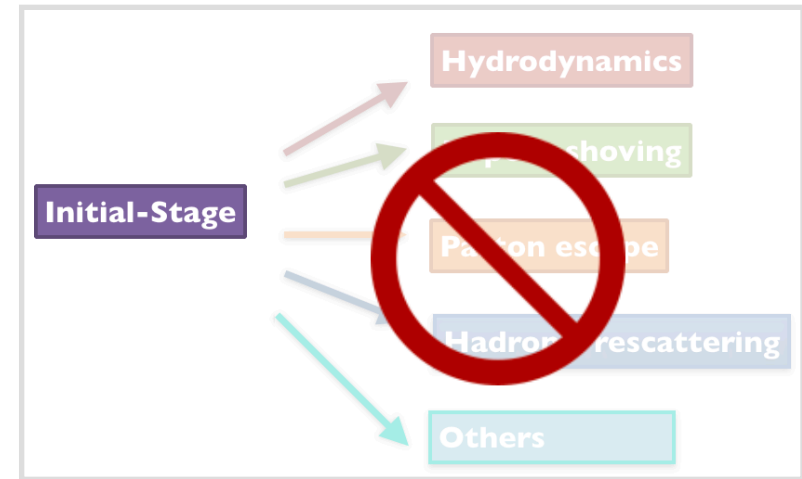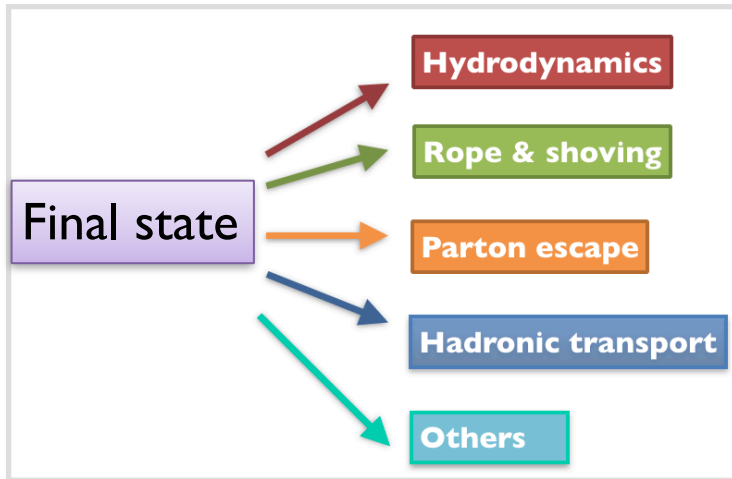- There might be still room for further

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Remaining open questions

❖ **What is the origins of the observed collectivity in small systems?**

- Initial stage correlation? Final state effects? Or Combined?

- There is no model which can describe the overall picture

- Possible answers in this workshop: IP-Glasma, iEBE-VISHNU, superSONIC, AMPT, Bayesian Analysis, Deep learning

- Need key observable to discriminate ISE and FSE

CSCS2019 ?