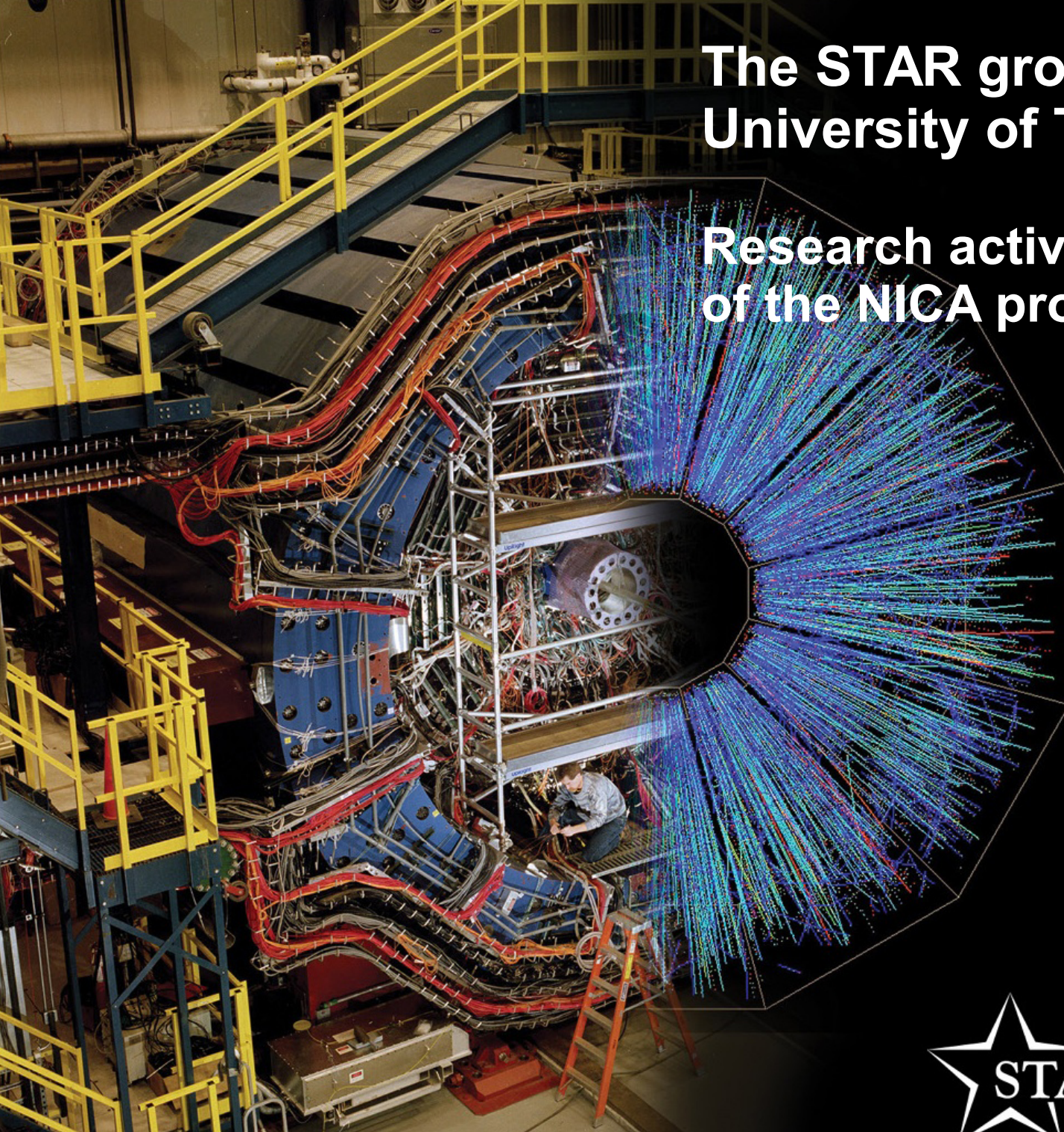


# The STAR group at the Warsaw University of Technology

## Research activities in the context of the NICA project



**Daniel Kikoła**



**Wydział  
Fizyki**

POLITECHNIKA WARSZAWSKA

# The STAR group at WUT

## femtoscscopy

Hanna Zbrozczyk  
Jan Pluta  
Adam Kisiel  
Diana Pawłowska  
Sebastian Siejka  
Maria Stefaniak  
Paweł Szymanski  
Daniel Wielanek  
Martin Girard  
Gabriela Pokropska  
Tomasz Lehmann

## heavy quarks

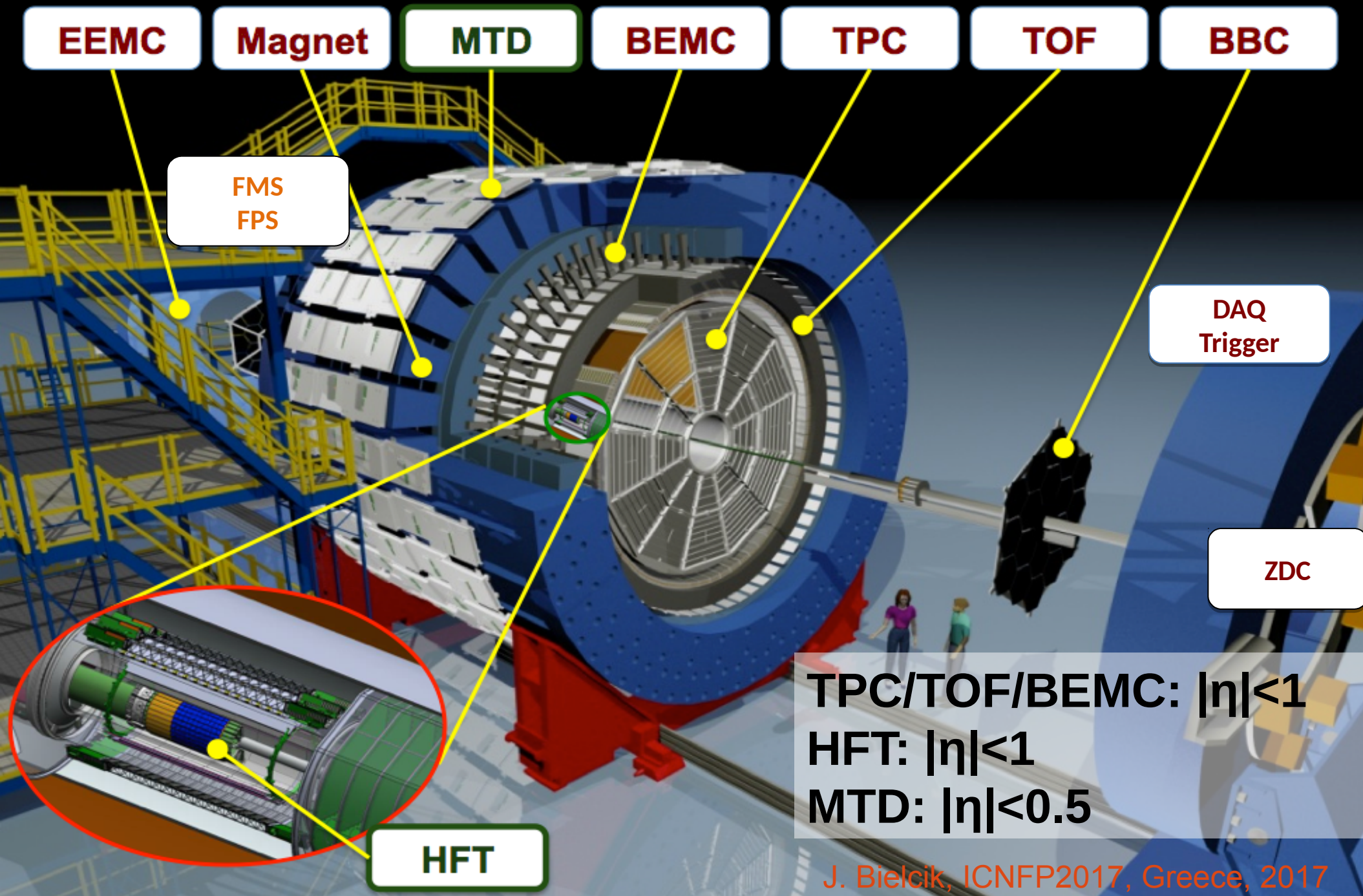
Daniel Kikoła  
Janusz Oleniacz  
Leszek Kosarzewski  
Karolina Kmieć

## angular correlations

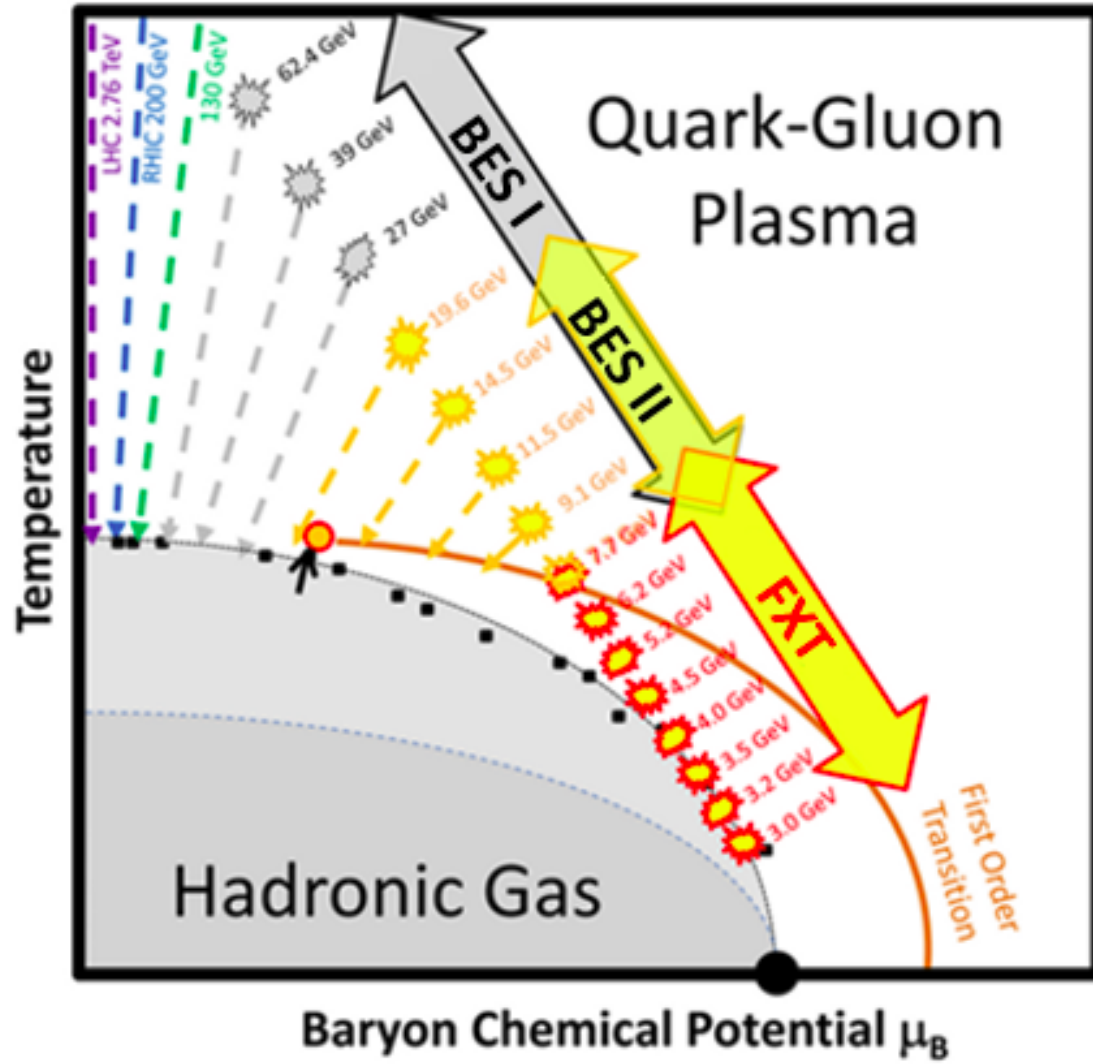
Andrzej Lipiec  
Łukasz Kozyra  
Piotr Kopaczewski

Faculty members  
PhD students  
MSc/Eng students

# The STAR experiment



# Physics program

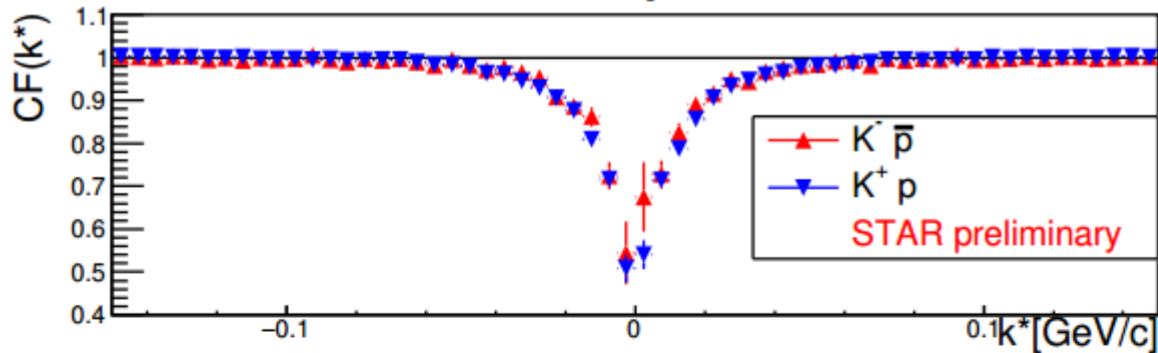


- Beam Energy Scan I
- Beam Energy Scan II
- STAR Fixed Target program

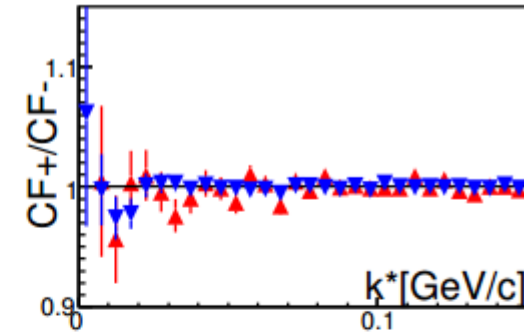
# Non-identical particle femtoscopy

Au+Au collisions at  $\sqrt{s_{NN}} = 39$  GeV

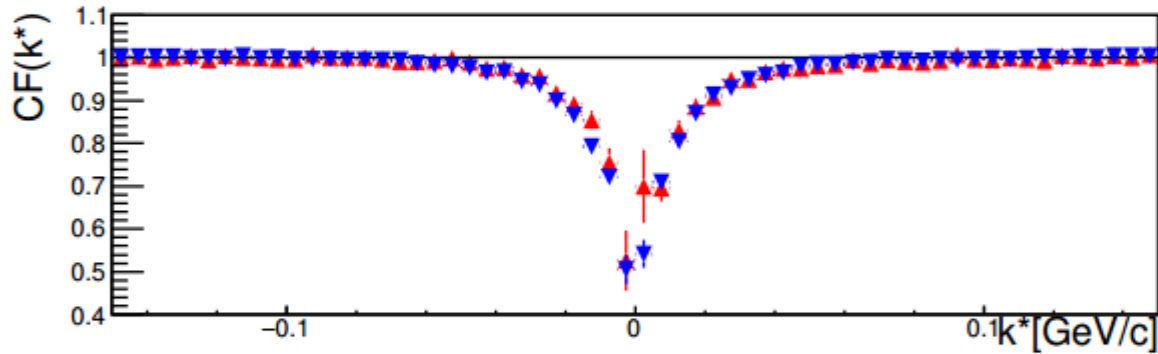
Long



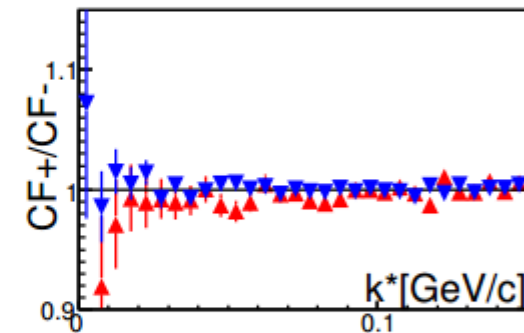
DR Long



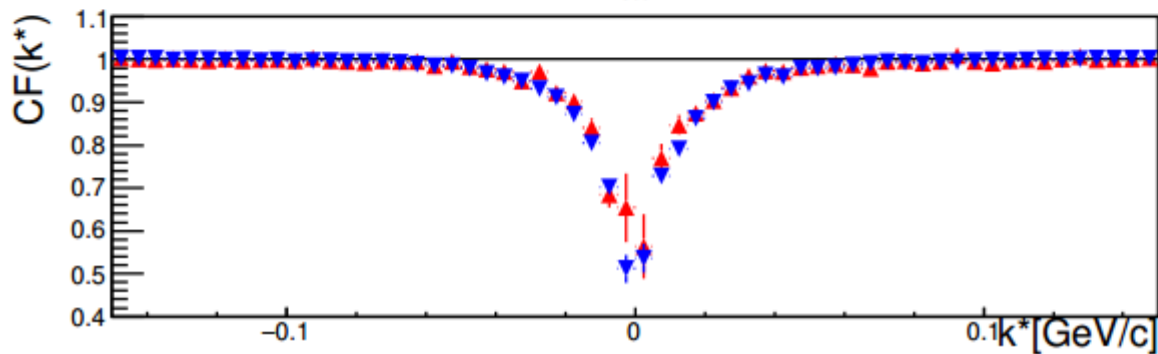
Side



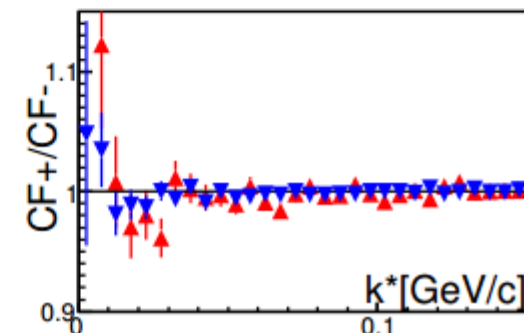
DR Side



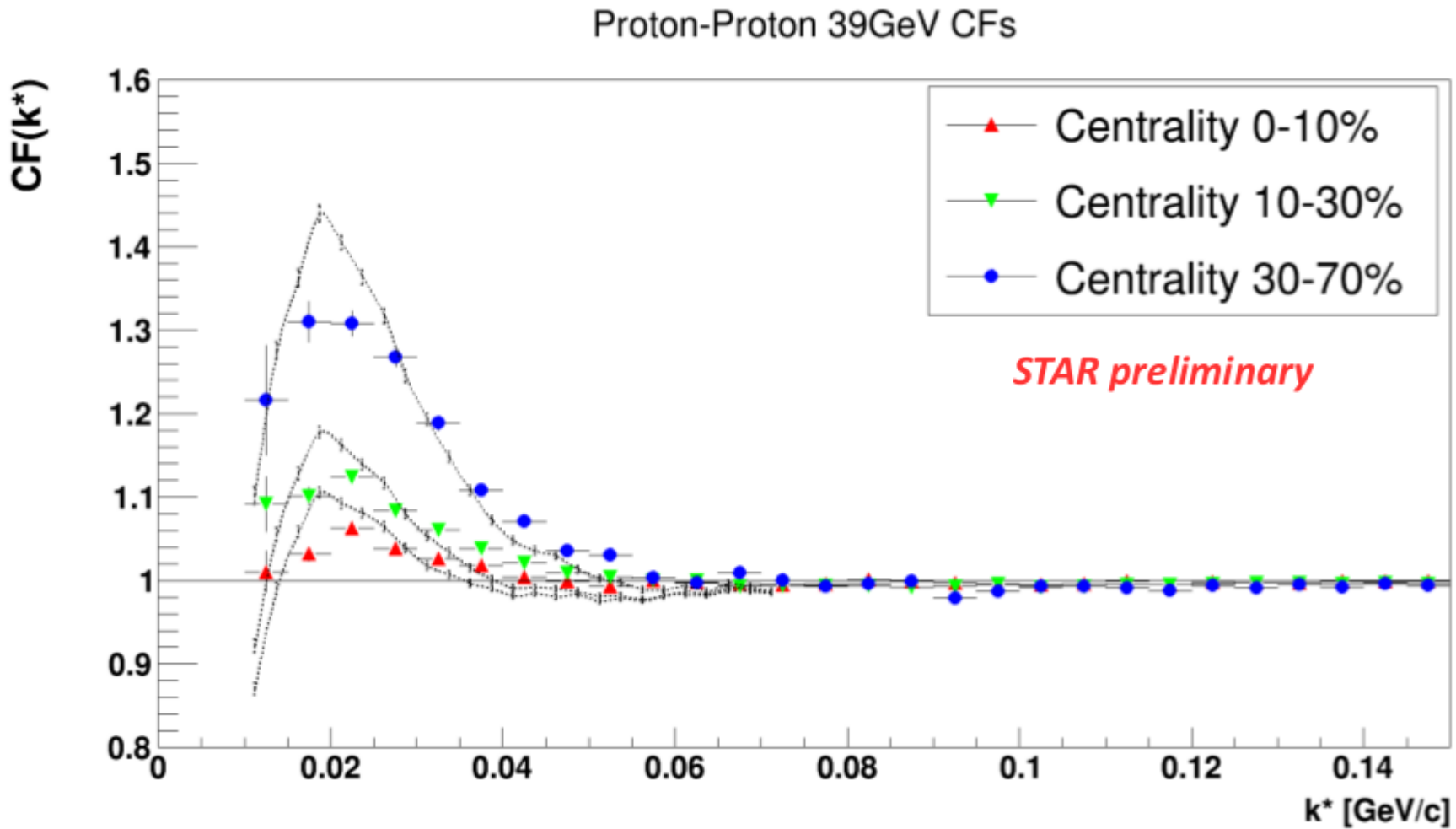
Out



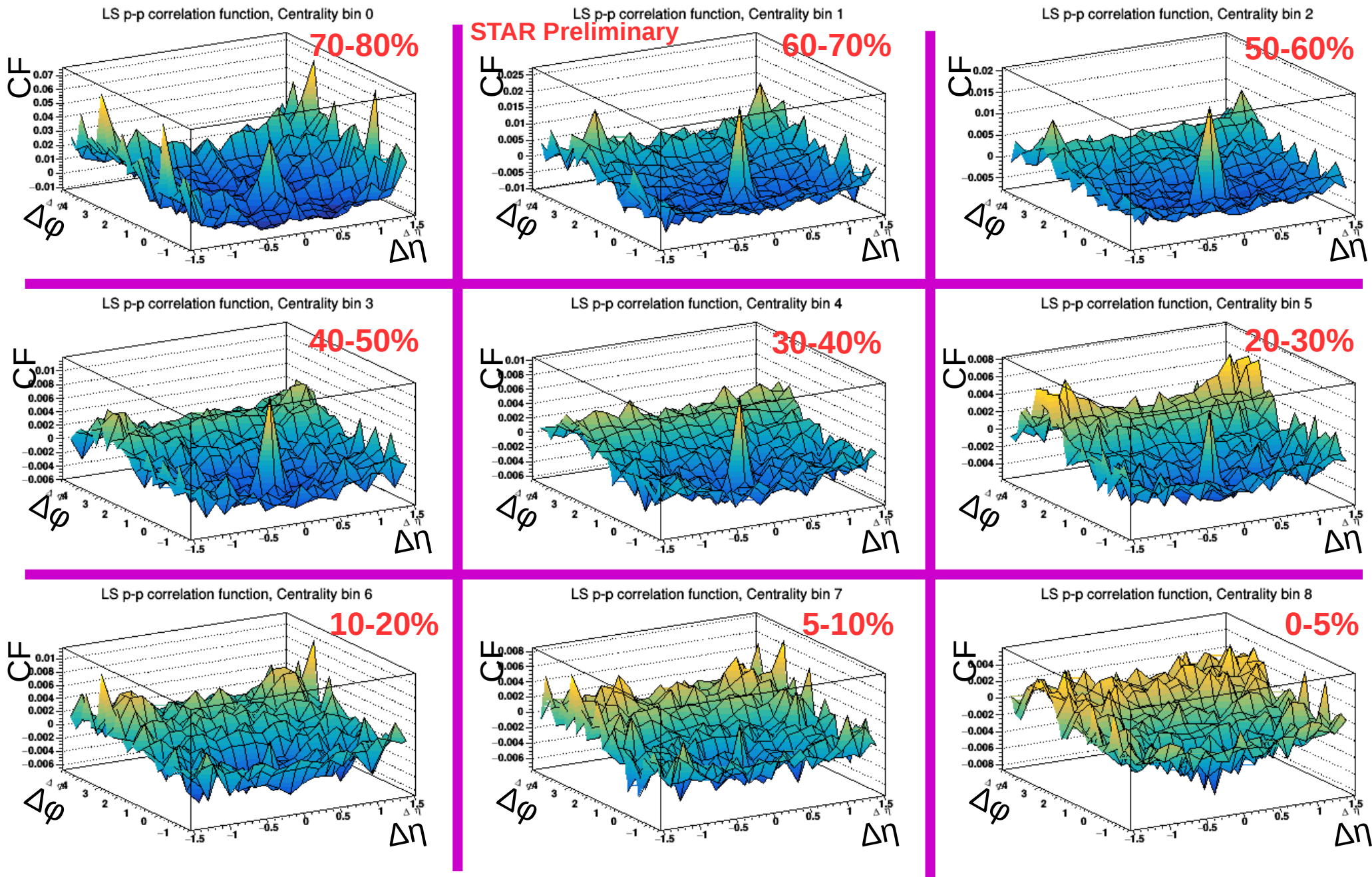
DR Out



# Proton femtoscopy

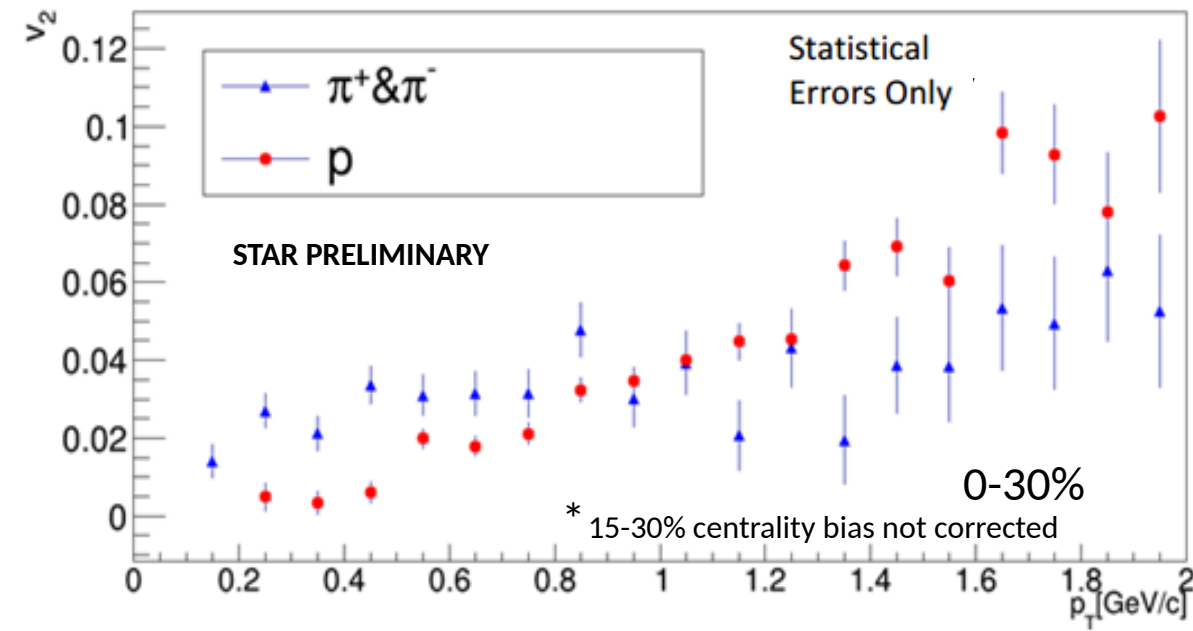


# Like-sign proton-proton correlations, AuAu @ 19.6 GeV

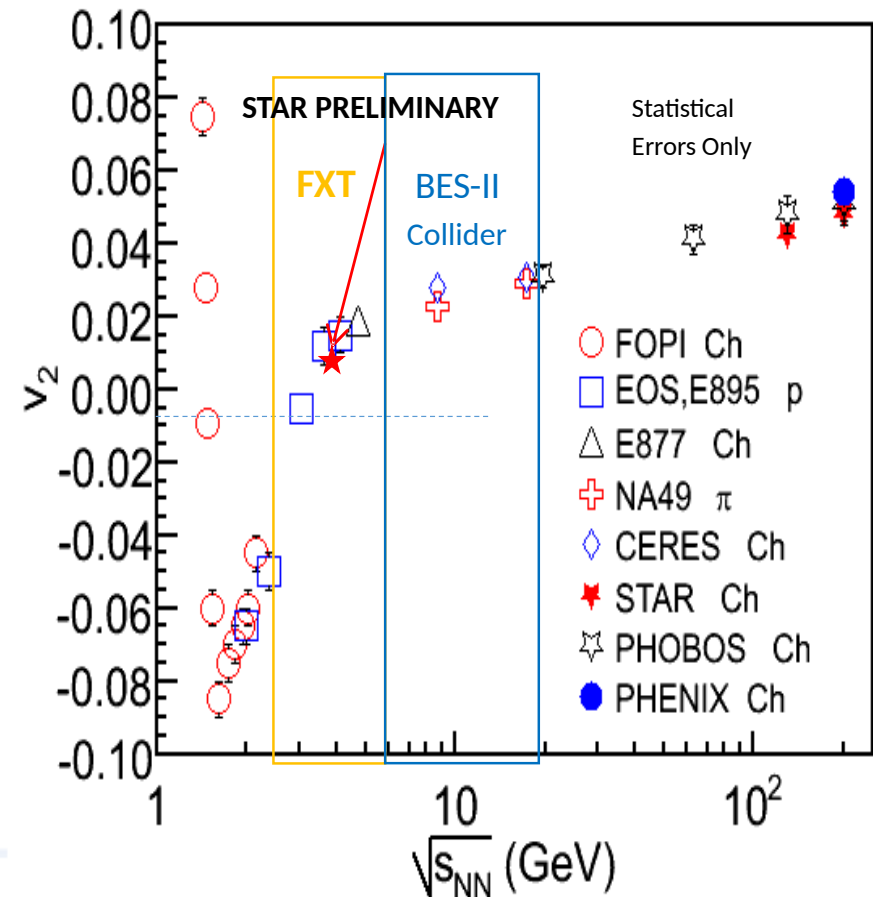
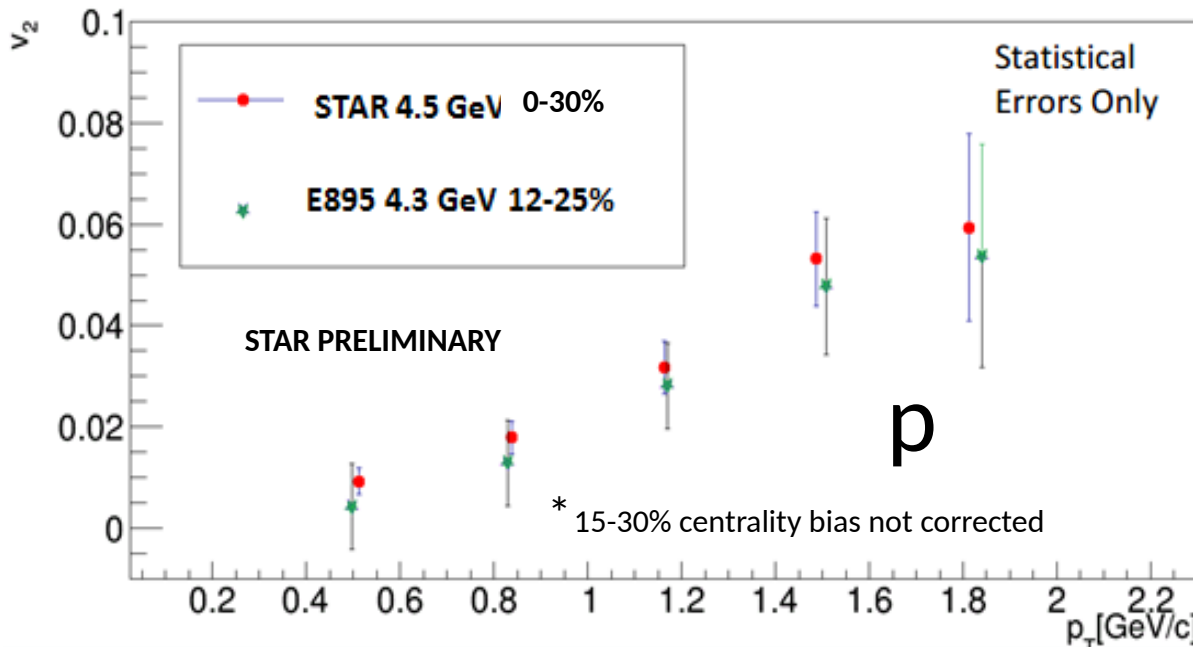


# Elliptic flow in the STAR Fixed Target

STAR data analysis by  
Łukasz Kozyra (Warsaw  
University of Technology)

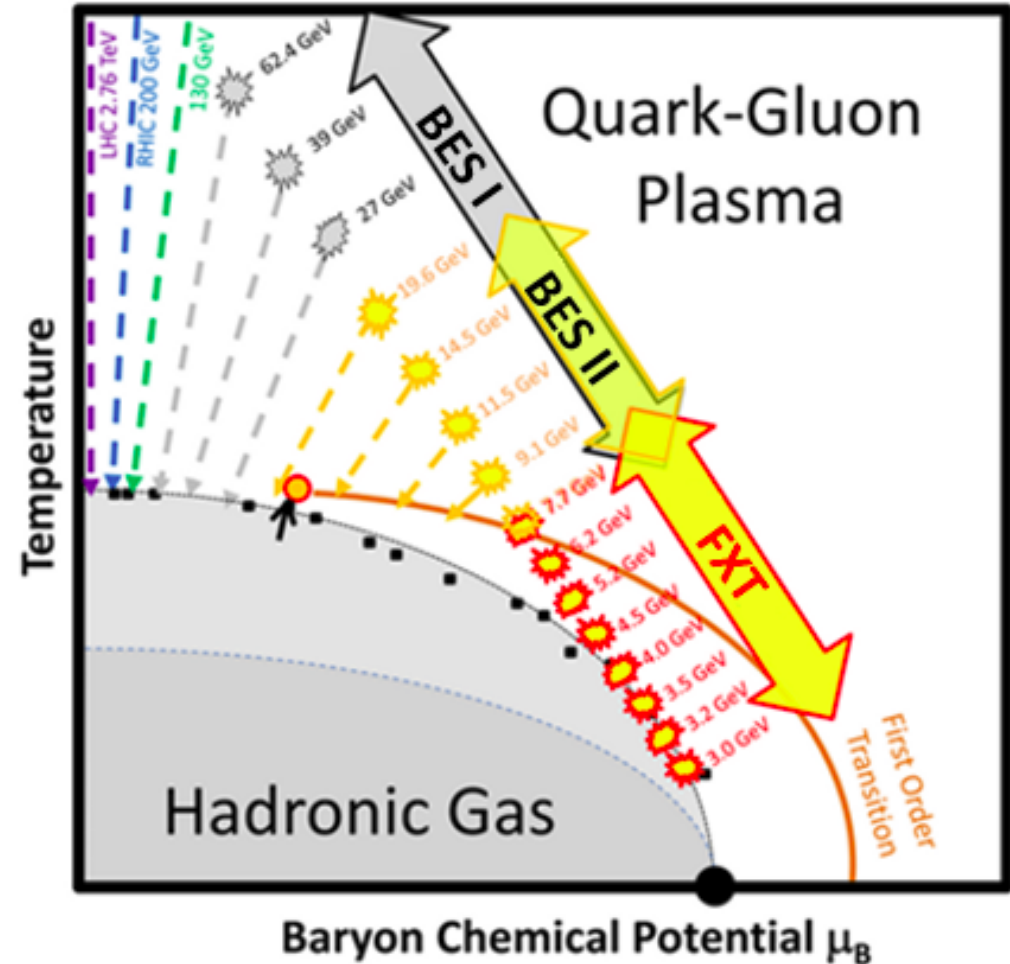


E895: Phys. Rev. Lett. 83 (1999) 1295





- Physics program:
  - Beam Energy Scan I
  - Beam Energy Scan II
  - STAR Fixed Target program
  
- Expertise
  - femtoscopy
  - angular correlations
  - elliptic flow
  - heavy flavor production



STAR Collaboration, Nucl.Phys. A967 (2017) 808-811

Backup

