

# ePIC dRICH simulation activities in INFN Trieste

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# Simulation Activities in INFN-TS for ePIC PID

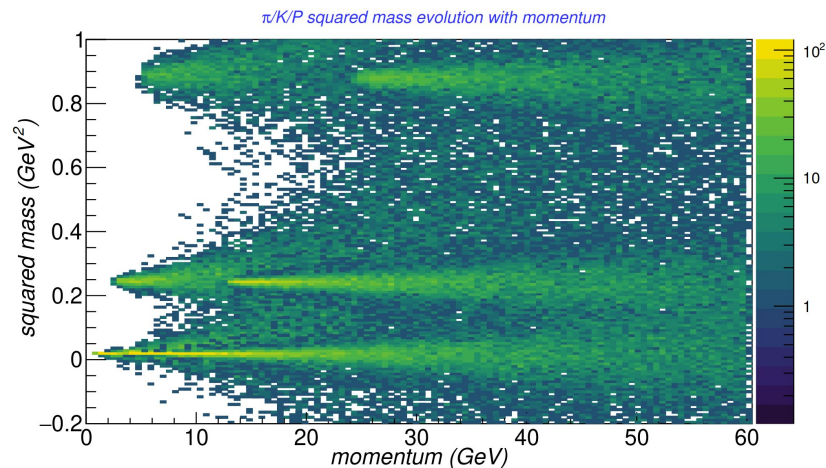
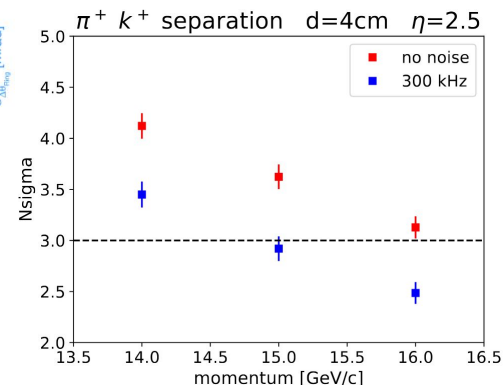
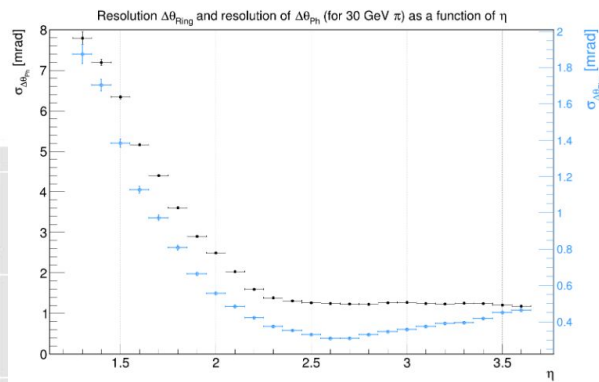
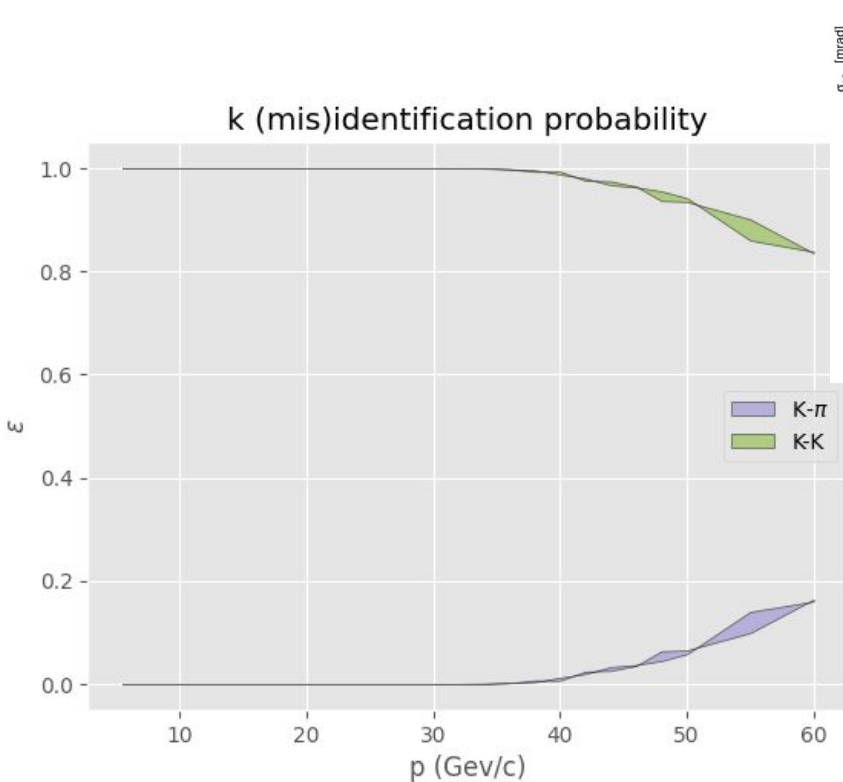
## INFN Trieste is heavily involved in ePIC dRICH simulation studies.

- It is serving the role of coordinating the simulation activities involving a large collaboration. Around 15 people from 9 different institutes of three countries (Italy, India and USA).
- Involvement since long time.
  - The Yellow report;
  - ATHENA detector proposal;
  - Finally, ePIC.
- INFN-TS participants so far:
  - Chandradoy Chatterjee (coordination and simulation activities)
  - Jinky Agarwala.
  - Silvia Dalla Torre and Fulvio Tessarotto (Advisory level)
  - Past Students:
    - Gabrielle Furlani (staging studies on ePIC dRICH simulation)
    - Tiziano Boasso (bachelor thesis on ePIC dRICH simulation :  
Simulation studies of the dual radiator RICH of the ePIC experiment at EIC.

### **Not only dRICH**

- Our contribution to the EIC PID hardware and simulation studies go hand-in hand.
- INFN TS is one of the two early proponents of a proximity focusing RICH detector in the backward end-cap.
- INFN TS contributed significantly from the simulation and photo-sensor side in the backward PID review for ePIC.

# dRICH Simulation Activities in INFN-TS (A snapshot)



Holistic contribution: Overall performance, microscopic studies, coordination...