

# ExtreMe Matter Institute EMMI

EMMI Rapid Reaction Task Force

## Nuclear Physics Confronts Relativistic Collisions of Isobars

Heidelberg University, Germany, May 30 – June 3 & October 12 – 14, 2022



UNIVERSITÄT  
HEIDELBERG  
ZUKUNFT  
SEIT 1386



### Organizers:

Giuliano Giacalone  
Jiangyong Jia  
Vittorio Somà  
You Zhou

### Heavy Ion Collisions:

Federica Capellino  
Hannah Elfner  
Frédérique Grassi  
Eduardo Grossi  
Jan Hammelmann  
Andreas Kirchner  
Matthew Luzum  
Jaki Noronha-Hostler  
Jean-Yves Ollitrault  
Nils Saß  
Björn Schenke  
Chun Shen  
Huichao Song  
Derek Teaney  
Wilke van der Schee

### Nuclear Structure:

Anatoli Afanasjev  
Benjamin Bally  
Jean-Paul Ebran  
Dean Lee  
Tamara Nikšić  
Takaharu Otsuka  
Luis Robledo  
Tomas Rodriguez  
Wouter Ryssens  
Yusuke Tsunoda

**The first official collaboration  
between the two fields.**

**First meeting:** 30.05.2022 – 03.06.2022

**Venue:** Seminarraum @ Philosophenweg 19

**Geographical diversity:**  
10 countries represented  
across two hemispheres.



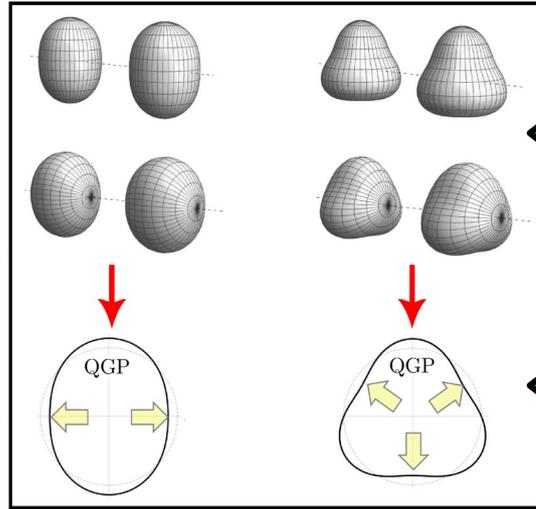
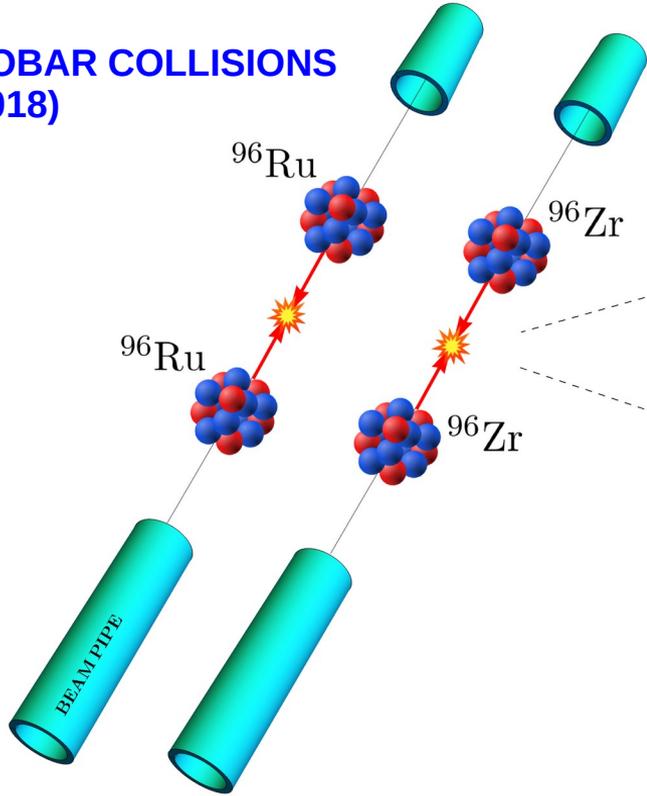
**Gender diversity:** 25% of Task Force members are female.

**Career diversity:** 30% of Task Force members are early-career.  
(from PhD students to non-tenured faculty)

# SCIENTIFIC GOAL

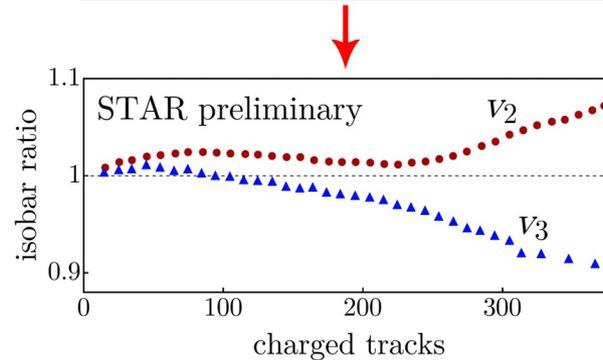
Formalizing connection between two fields.  
Consistent nuclear phenomenology across energy scales.

ISOBAR COLLISIONS  
(2018)



LOW-ENERGY  
NUCLEAR STRUCTURE

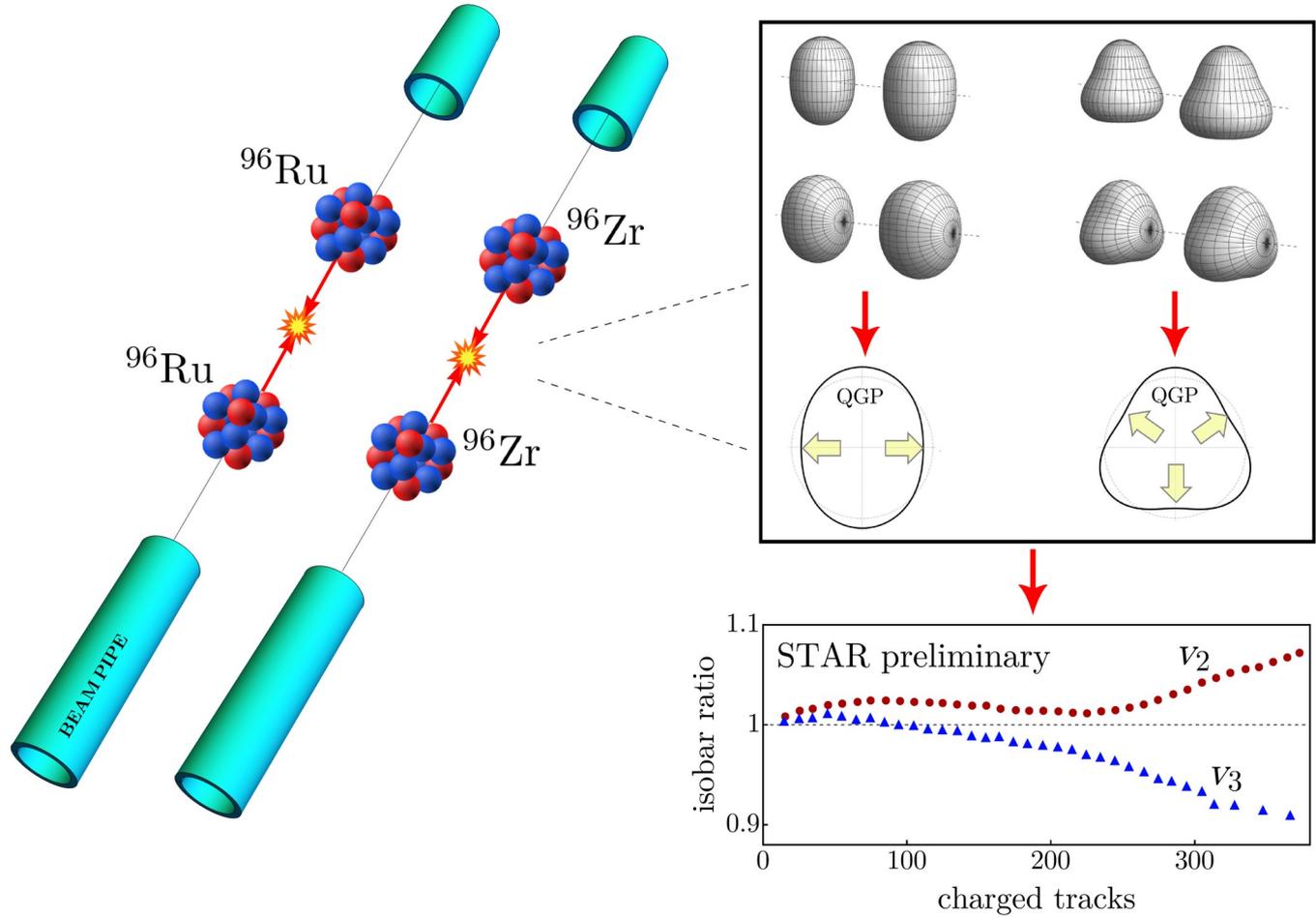
HIGH-ENERGY  
HEAVY-ION COLLISIONS



Combined effort  
of two communities  
to explain data.

ENJOY THE TALKS!

(+ welcome reception)



Website of the event: <https://indico.gsi.de/event/14430/>