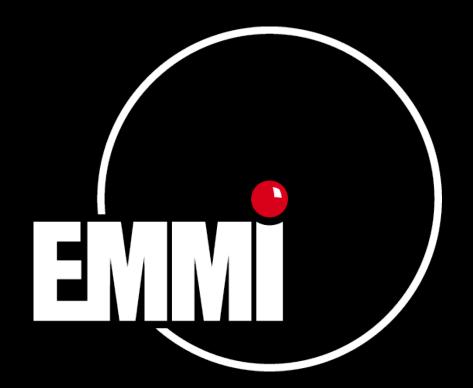
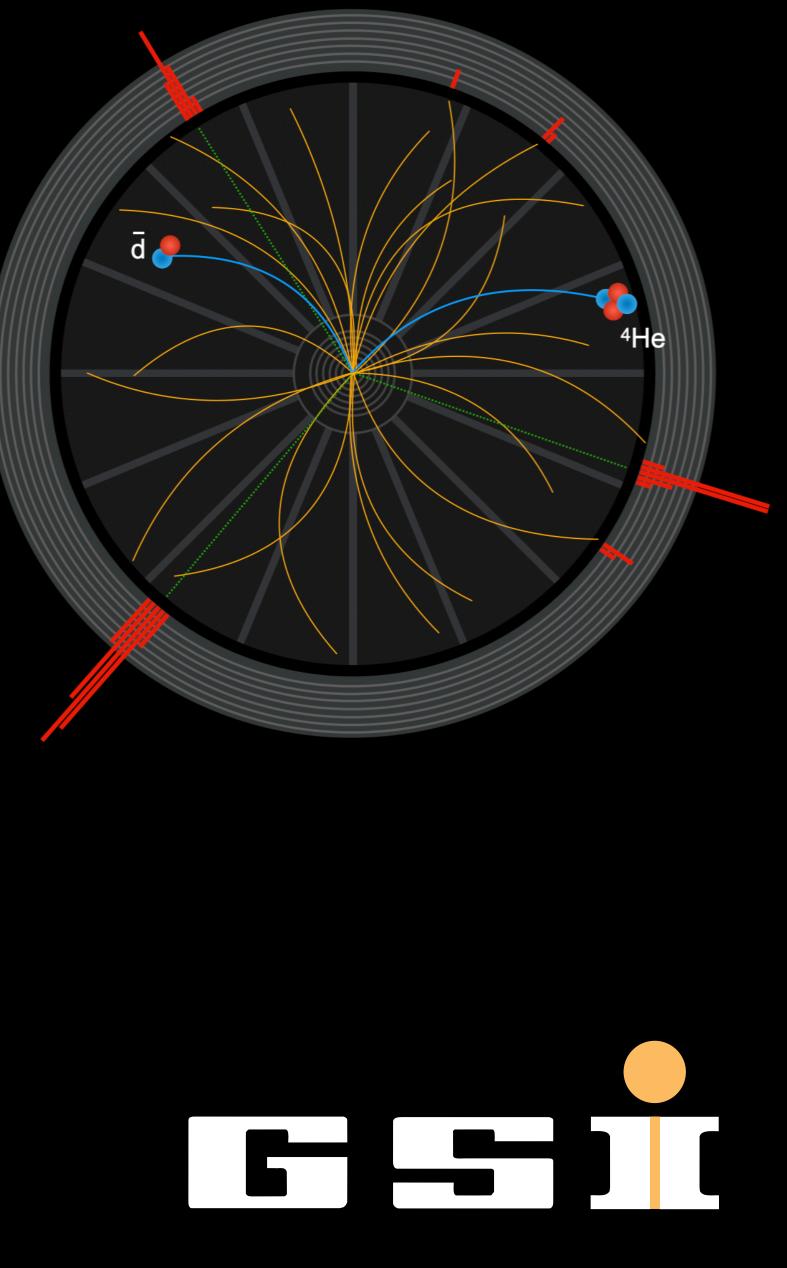
Rapid Reaction Task Force on Understanding the production of light (anti)nuclei at RHIC and LHC

8-12 April, 2024

Organizers: A. Caliva, H. Elfner, J. Schukraft, K. Blum





Open symposium



The ExtreMe Matter Institute (EMMI) at GSI

Founded in April 2008 in the framework of the Helmholtz Alliance "Cosmic Matter in the Laboratory" Since 2015 EMMI is a division of GSI

<u>13 partner institutions</u> (\sim 400 scientists) + internationally renowned scientists closely linked to it as Associated Partners

Main goal: fostering forefront research on matter under extreme conditions of temperature, pressure or density.

Main research areas of EMMI

- properties of the quark-gluon plasma and the phase structure of strongly interacting matter and new hadronic states
- structure and dynamics of neutron matter
- electromagnetic plasmas of high energy density
- In ultra-cold quantum gases and extreme states in atomic physics
- ... all understood in a broad sense.

EMMI structure

EMMI management

- Scientific Director: Prof. Dr. Peter Braun-Munzinger
- Scientific Coordinator: <u>Prof. Dr. Carlo Ewerz</u>

Steering Committee: EMMI Director + 1 representative from each partner institution + 2 representatives of the <u>Associated Partners</u>.

A <u>Scientific Advisory Committee</u>: 8 external experts whose role is to advise EMMI and the Steering Committee concerning the scientific program.

eter Braun-Munzinger Dr. Carlo Ewerz

Main activities

Support, organize and host scientific events on topical and interdisciplinary subjects in the research areas of interest to EMMI

New workshop format: Rapid Reaction Task Force (RRTF) meeting focussed scientific problem of current interest in intense discussions.

EMMI is strongly committed to fostering the education and training of young researchers. Close collaboration with the graduate schools at the surrounding universities such as the Helmholtz Graduate School for Heavy-Ion Research (HGS-<u>HIRe</u>) and the <u>Heidelberg Graduate School of Fundamental Physics</u>.

World-leading experts meet for a few days (up to 2 weeks) to address and clarify a







On this RRTF meeting

Understanding the production mechanism of light (anti)nuclei in high-energy hadronic collisions at RHIC and LHC energies

Major experts from both theory and experimental community will work together to address such a hot topic in nuclear physics and possibly find a solution to some open problems

Today's open symposium

9:10 - 9:55

Experimental overview on light (anti)(hyper)nuclei production at the LHC



Chiara Pinto

9:55 - 10:40

Experimental overview on light (anti)(hyper)nuclei production at RHIC

10:40 - 11:10



Zhangbu Xu

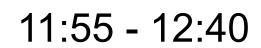




Coffee break

11:10 - 11:55

Thermal production of light (anti)(hyper)nuclei



Production of (anti)(hyper)nuclei via coalescence and kinetic approach

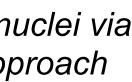


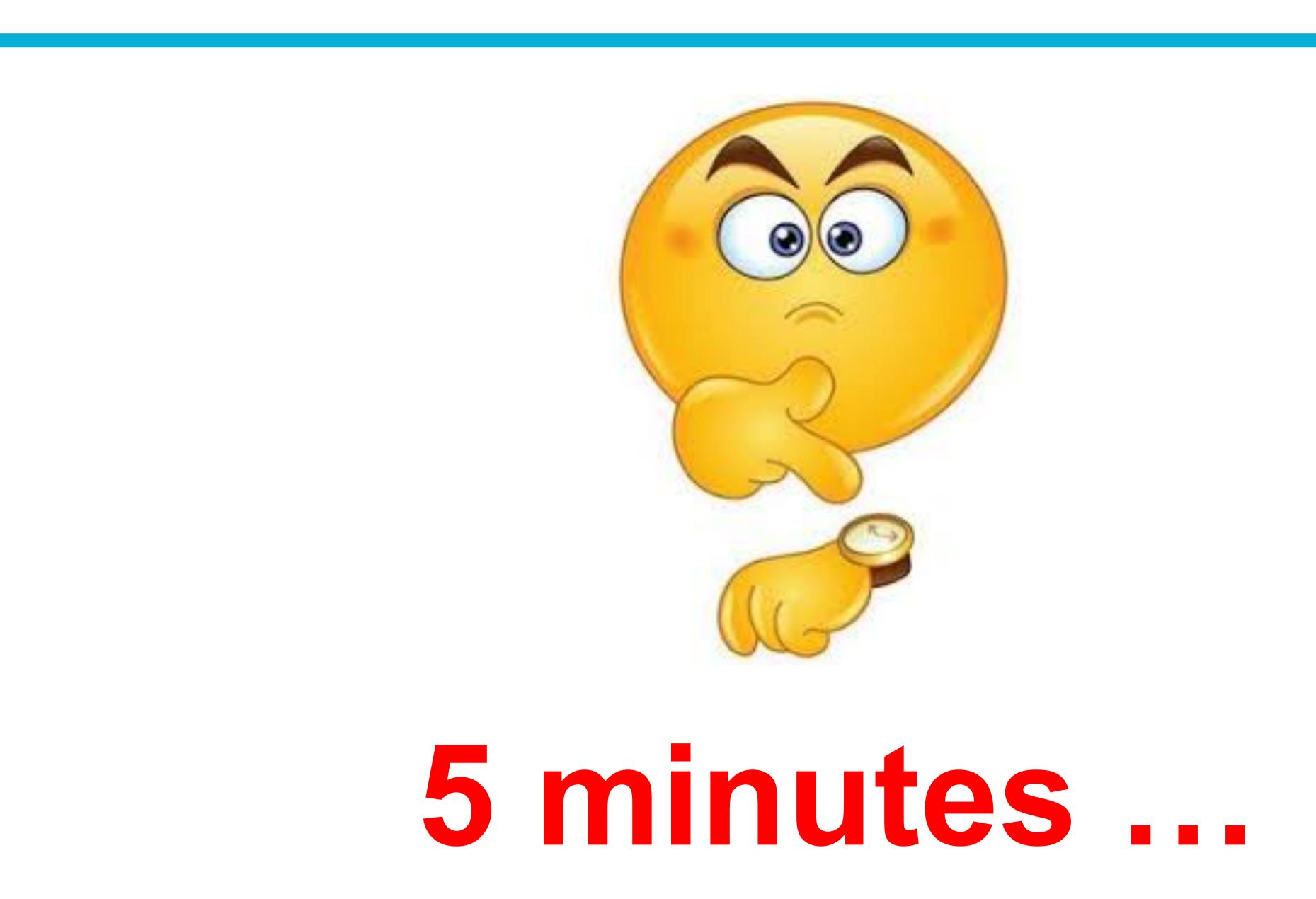
Volodymyr Vovchenko



Kai-Jia Sun

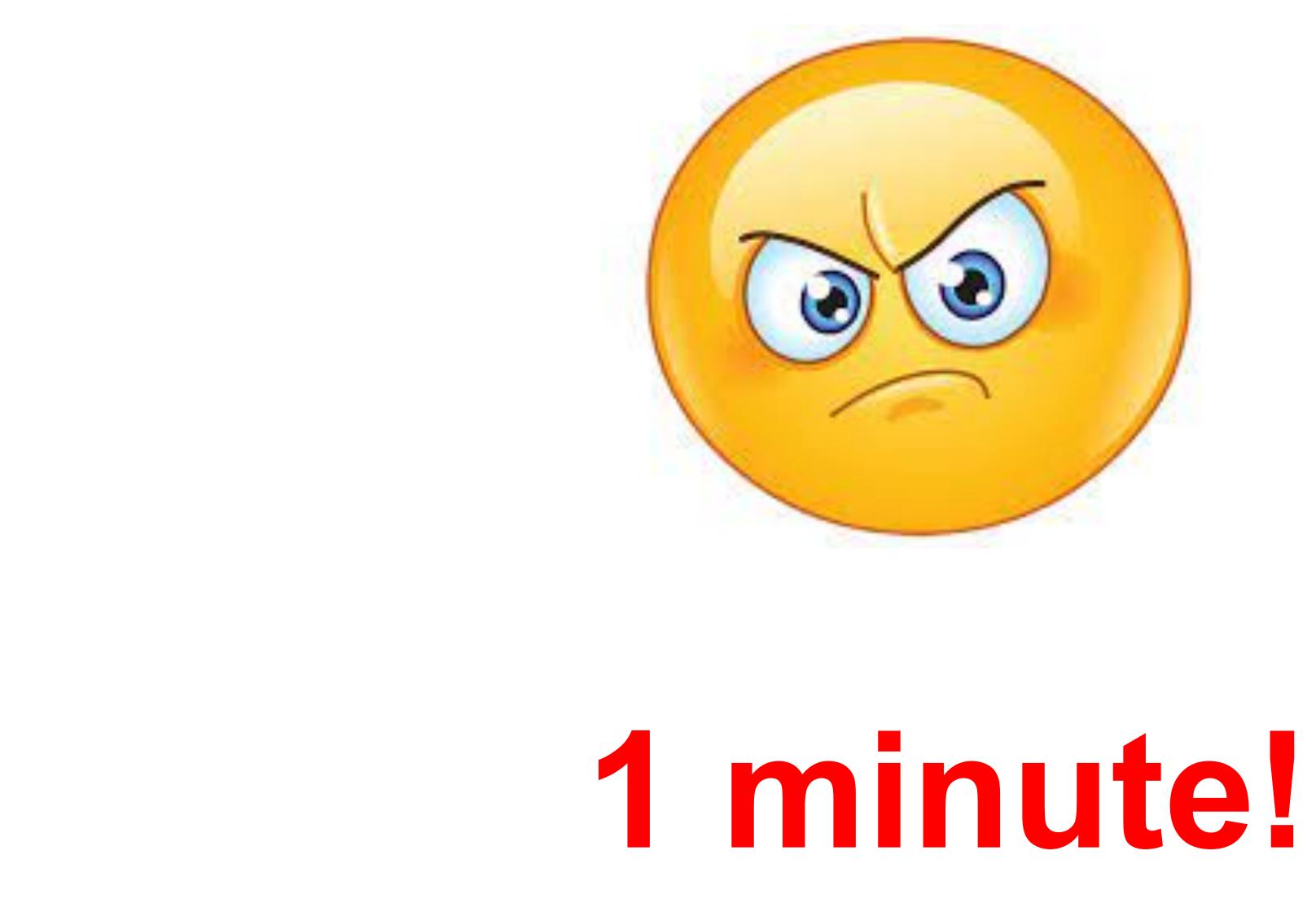






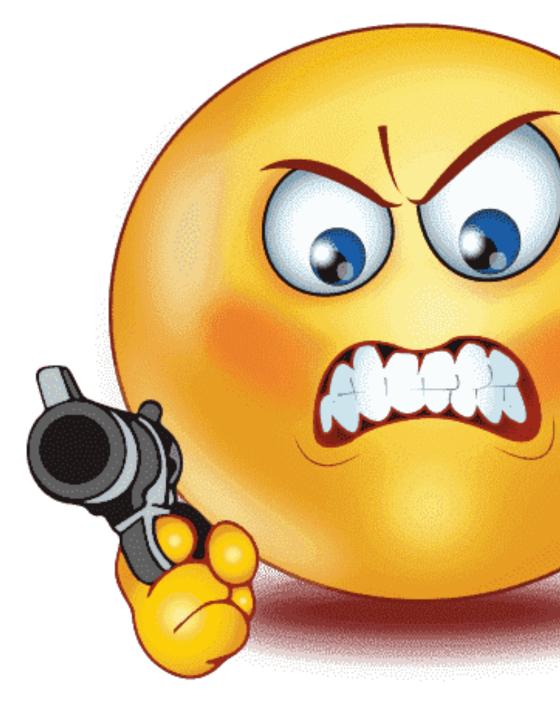








Stop talking!



If you don't stop talking ...



The box of questions/ideas and proposals



- For the EMMI RRTF participants
- Discussion session this afternoon on topics selected from the open symposium
- Write down on a card your question or problem to be discussed and put the card into the box
- →Topics will be selected randomly from the cards found inside the box

EMMI code of conduct

It is the policy of EMMI that all participants, including attendees, speakers, award recipients, volunteers, staff, contractors and all other stakeholders at EMMI meetings, will conduct themselves in a professional manner contributing to the advancement of science.

Creating a constructive environment to enable respectful exchanges is the responsibility of all participants, which excludes any form of discrimination, harassment or retaliation.

https://www.gsi.de/emmi-code-of-conduct



Everybody on point! We are here to make science!



Thank you for your attention and

enjoy the Symposium