



ExtreMe Matter Institute EMMI

EMMI Workshop

3rd workshop on anti-matter, hyper-matter
and exotica production at the LHC

University of Wroclaw, Poland
December 2-6, 2019

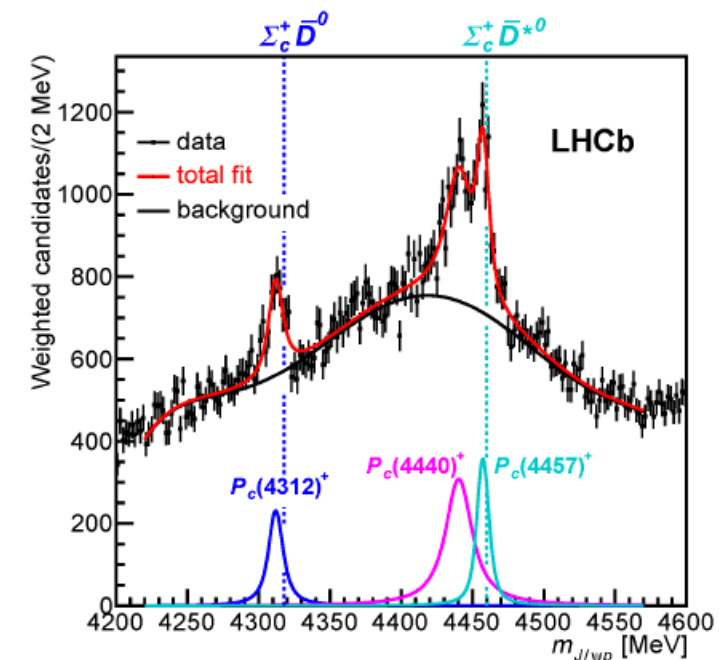
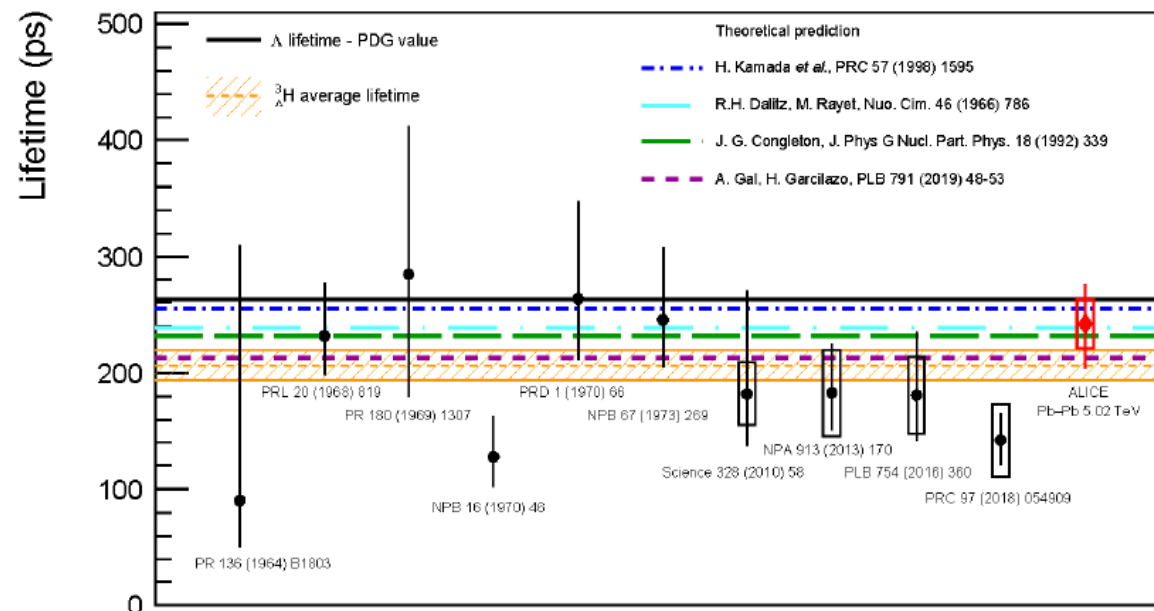
Topics

- Production of anti-matter in high-energy collisions
- Structure of light nuclei and exotic compounds
- Hypernuclear production and decay
- Hyperon-nucleon and hyperon-hyperon interaction
- Searches for exotic states composed of light and heavy quarks
- Coalescence and thermal model predictions
- Applications in astrophysics, in particular neutron stars and mergers
- Future experimental and theoretical perspectives

Organizers

Dönigus, Benjamin – U Frankfurt
 Bufalino, Stefania - Politecnico di Torino
 Redlich, Krzysztof - University of Wroclaw
 Schaffner-Bielich, Jürgen - U Frankfurt
 Turko, Ludwik - University of Wroclaw

Credit: ALICE Collaboration, PLB 797, 134905 (2019)



Credit: LHCb Collaboration, PRL, 122, 222001 (2019)

4 days and half with 18 sessions and
41 contributions to discuss the following topics:

Monday 2nd : Overview from experiments (not only heavy-ions) and theoretical approaches plus hypernuclei (present status and perspectives)

Tuesday 3rd : Exotica and strangeness production, hyperon-baryon and hyp-hyp interaction with two- particle correlations (experiment & theoretical predictions)

Wednesday 4th : Exotica, hypernuclear physics plus connection to Astrophysics and compact stars

Thursday 5th : Neutron stars, hypernuclei and hadron-hadron correlation in nuclear collisions

Friday 6th : Bound states, correlations and light nuclei production in heavy-ion collisions

**Each day will end with a wrap-up session dedicated
to a brainstorming of the discussed topics**

- **Internet access:** the eduroam network is accessible in the workshop room
- **Welcome reception (tonight at 7pm) will take place at the the Institute of Theoretical Physics.** More details in the afternoon and some infos already at <https://indico.gsi.de/event/9423/page/0>
All participants are required to wear their badge well visible.
- ***Conference dinner will be on Thursday 5th*** and more details will be given later during the week

Welcome to all of you for a productive workshop!
Let's enjoy talks and discussions on this
very active field!