

CMS Young Scientists Committee

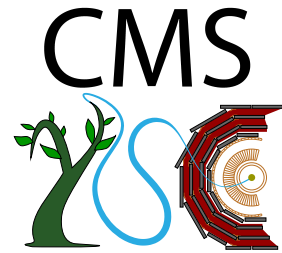
An introduction

Muhammad Ansar Iqbal,
on behalf of the YSC

12th CMS Induction Course

20 September 2021

Prelude



- Career levels of CMS Collaboration members:

1110

UNDERGRADUATES
(824 MEN, 286 WOMEN)

1037

PHYSICS DOCTORAL STUDENTS
(796 MEN, 240 WOMEN)

1065

ENGINEERS
(933 MEN, 132 WOMEN)

1906

PHD PHYSICISTS
(1569 MEN, 337 WOMEN)

<https://cms.cern/collaboration/people-statistics>

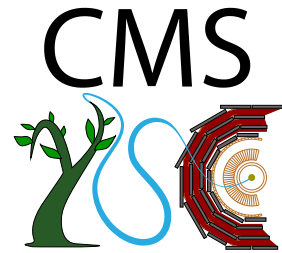
- The CMS Young Scientists Committee (YSC) formed in 2013 ([YSC Twiki](#))



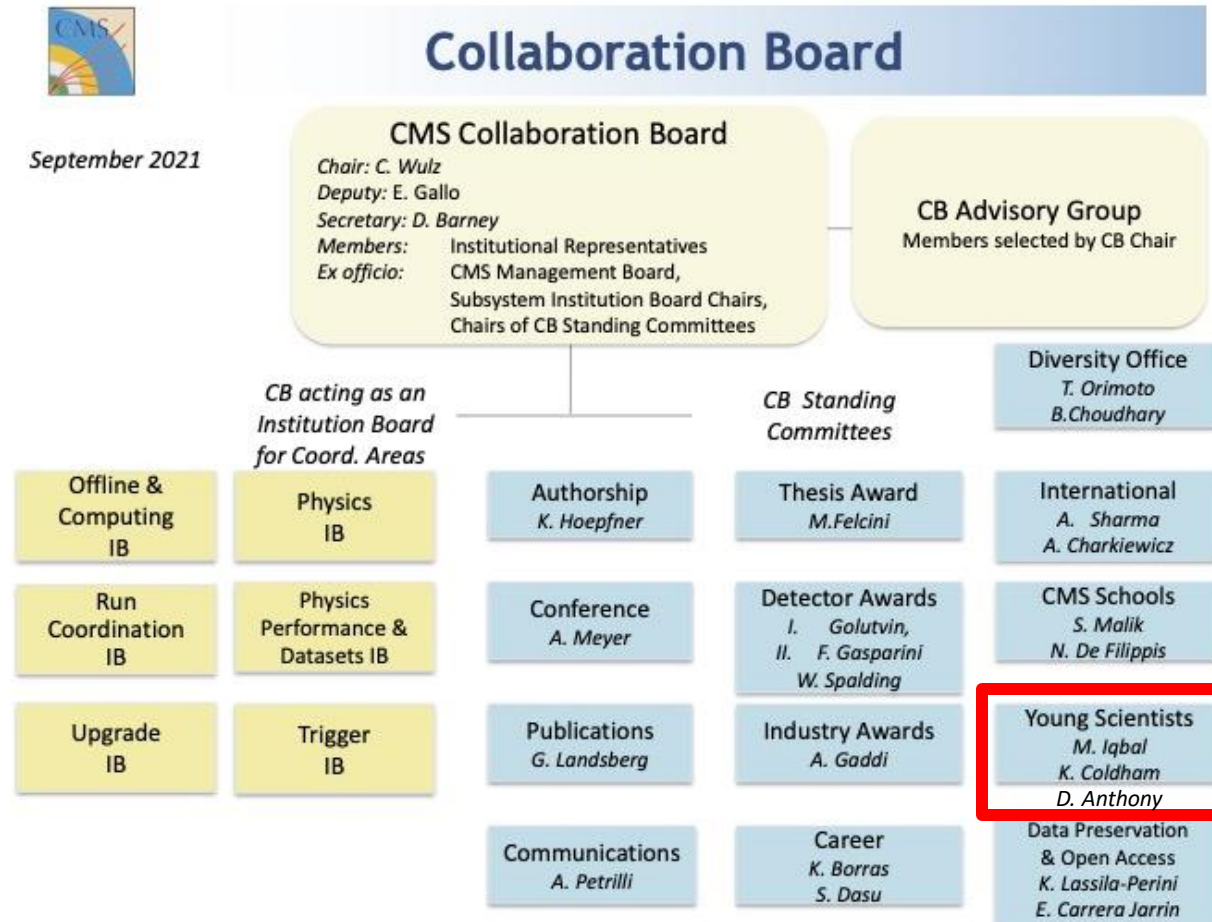
YSC mission statement

- **Represent** early career and untenured researchers of the CMS Collaboration
- **Ensure communication** with the collaboration and management boards
- **Organise** career, physics, and social events for the aforementioned young members
- **Collaborate** with young scientists groups of ALICE, ATLAS and LHCb; organise similar LHC-wide events

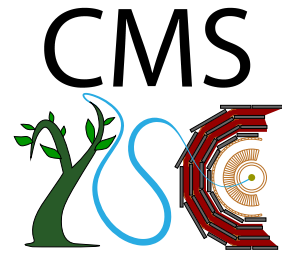
Representation in the Collaboration Board



- The YSC Chair is an ex-officio member of the Collaboration Board



Active members



Coordinator team



Muhammad Ansar Iqbal
Chair



Kathryn Wendy Coldham
Deputy Chair



David Benjamin Anthony
Secretary

Members



Adelina Lintuluoto



Bruno Alves



Liv Helen Våge



Melissa Quinnan

Advisory members



Aneliya Karadzhinova-Ferrer



Fengwangdong Zhang



Gurpreet Singh Chahal



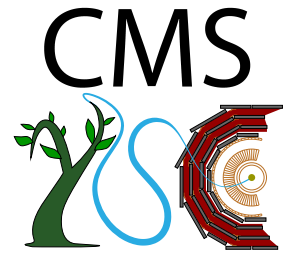
Patrick Asenov



Tamás Álmos Vámi

More details in the backup slides

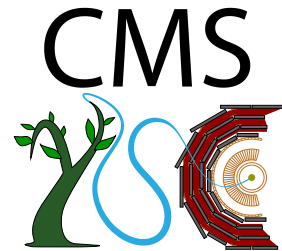
Nationalities and home institutes



Nationalities and countries of home institutes of the current YSC members (2021-2022)



Activities of the YSC



Surveys

- Surveys to understand the needs of young CMS members
- Examples: PhD students' experiences, travel needs, childcare support
- Results presented to the collaboration and management boards



Job matching events

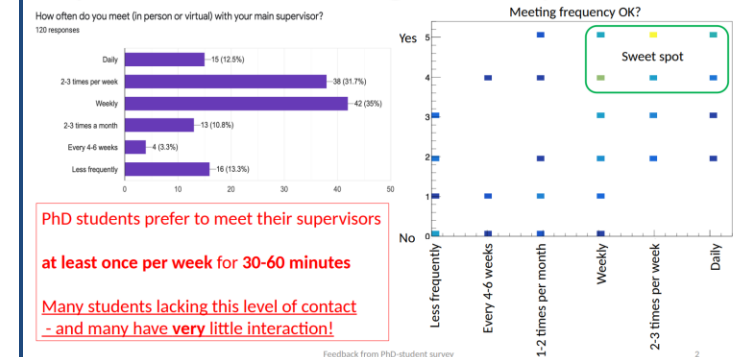
- Introduce researchers offering jobs in CMS to prospective candidates
- Fourth iteration being held during the week of 11 – 15 October ([Indico](#))
- Also feature motivational talks from tenured researchers in CMS



LHC ice cream events

- Conversation with a panel of experts on broader topics over ice cream
- This year's event on 5 October; topic: Machine learning in HEP ([Indico](#))
- **Gregor Kasieczka** from CMS giving the keynote/introductory talk

Supervision#1: meetings with supervisors



Machine learning in high energy physics

a Conversation over Ice Cream

Introduction to machine learning in HEP
- Gregor Kasieczka (CMS)

Generative models and where to find them in HEP
- Michael Kagan (ATLAS)

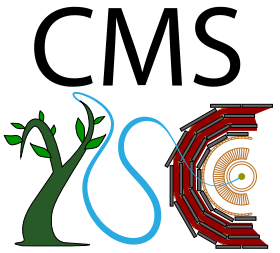
Graph neural networks
- Nikita Kazeev (LHCb)

BDT, shallow and deep neural network techniques
- Gian Innocenti (ALICE)

5 October 2021, 16:00 CEST
<https://indico.cern.ch/event/1074354/>



Activities of the YSC



LHC mentoring scheme

- Pair participating young members with mentors for guidance
- A successful first one-year iteration ended on 31 August
- Next iteration starting in November



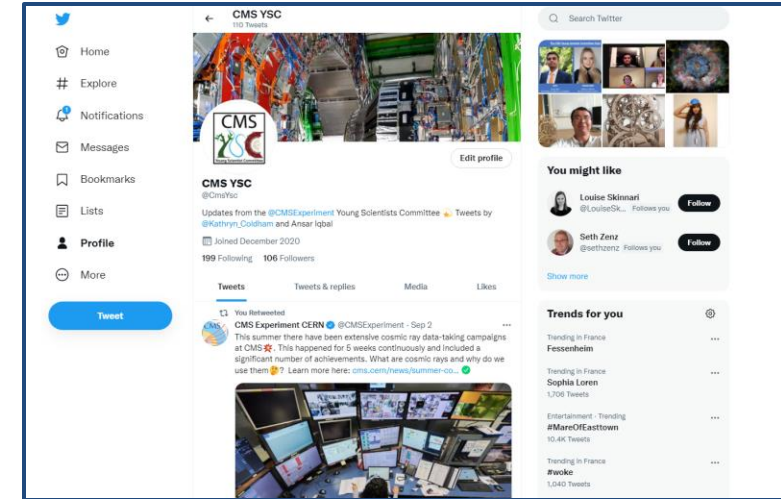
Social media and communications

- YSC [Facebook group](#) and [Twitter account](#); feel free to follow
- Work closely with CMS internal communications group
- A webpage in the CMS internal website and a dedicated YSC website

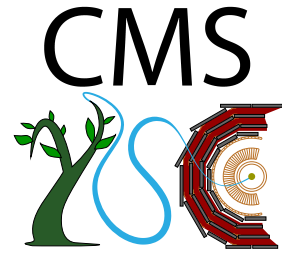


Social events

- Social events wherein the participants chat, eat/drink, play games
- Regularly during CMS weeks (picture on the right from Budapest 2018)
- For now, held virtually on Zoom once a month



Activities of the YSC



LHC soft skills workshops

- Discussion with a panel of experts on soft skills
- Latest event: Personal statement and research proposal writing ([Indico](#))
- Earlier: Working from home, CV writing, science comm., interview skills



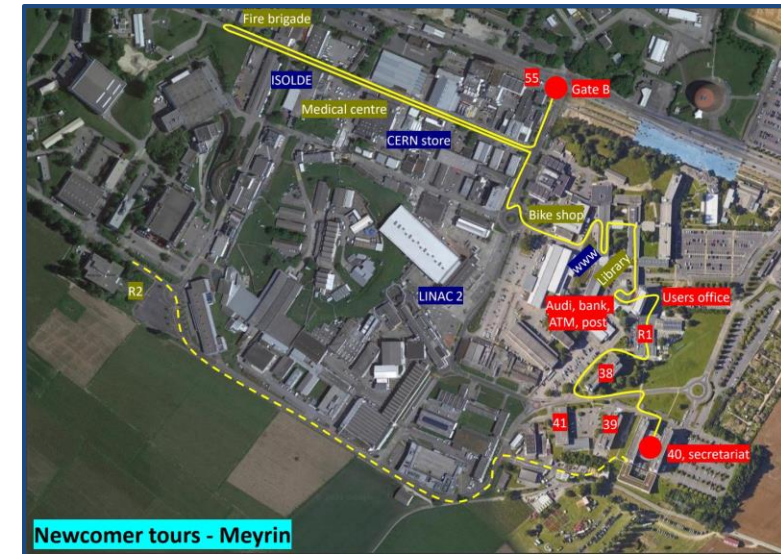
Journal reading club

- A journal reading club, wherein we discuss papers in monthly sessions
- 29 members; feel free to join: cms-young-journal-club@cern.ch
- Upcoming session at the end of September

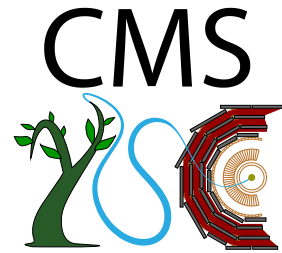


and many more

- Participation in the Snowmass process, organise career networking events, instructions for newcomers, CMS database and more!
- Upcoming: Promotional videos, drop-in sessions, tours, and more!

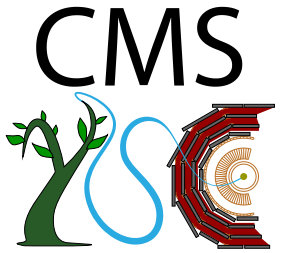


Calendar of activities



October 2021							Print	Week	Month	Agenda
Mon	Tue	Wed	Thu	Fri	Sat	Sun				
27	28	29	30	Oct 1	2	3				
		JMEv preparation meeting	Journal Reading Club session	Promotional video release	Virtual social					
4	5	6	7	8	9	10				
	Ice cream event	JMEv preparation meeting								
11	12	13	14	15	16	17				
Job Matching Event (JMEv) Fall 2021										
18	19	20	21	22	23	24				
	General meeting									
25	26	27	28	29	30	31				
				Journal Reading Club session	Virtual social	Promotional video release				
Events shown in time zone: Central European Time - Zurich							+ Google Calendar			

Contact us



Twiki: <https://twiki.cern.ch/twiki/bin/view/CMS/YoungScientistCommittee>

e-group: cms-young-scientist-committee@cern.ch

Interested in joining us? Contact the team management!



Team management

cms-YSC-chair-and-deputy@cern.ch

- muhammad.ansar.iqbal@cern.ch – **Chair**
- kathryn.wendy.coldham@cern.ch – **Deputy Chair**
- david.bejnamin.anthony@cern.ch – **Secretary**



<https://www.facebook.com/groups/843805749716562>



[@CmsYsc](https://twitter.com/CmsYsc)

Backup slides





CMS YSC active members



Muhammad Ansar Iqbal

CMS YSC Chair

Postdoctoral researcher
with the University of
California, Los Angeles;
based at CERN



Kathryn Wendy Coldham

CMS YSC Deputy Chair

Doctoral researcher at
Brunel University London



David Benjamin Anthony

CMS YSC Secretary

Doctoral researcher at the
University of Bristol



Adelina Lintuluoto

CMS YSC Member

Doctoral researcher with
Karlsruhe Institute of
Technology; based at
CERN



Bruno Alves

CMS YSC Member

Doctoral researcher at
École Polytechnique, LLR,
Paris



Liv Helen Våge

CMS YSC Member

Doctoral researcher at
Imperial College London



Melissa Quinnan

CMS YSC Member

Doctoral researcher with
the University of
California, Santa Barbara;
based at CERN



Aneliya Karadzhinova-Ferrer

CMS YSC Advisory Member

Postdoctoral researcher at
Helsinki Institute of Physics



Fengwangdong Zhang

CMS YSC Advisory Member

Postdoctoral researcher
with the University of
California, Davis; based at
CERN



Gurpreet Singh Chahal

CMS YSC Advisory Member

Research associate at
Imperial College London
and Durham University



Patrick Asenov

CMS YSC Advisory Member

Postdoctoral researcher at
Consiglio Nazionale delle
Ricerche and Istituto
Nazionale di Fisica
Nucleare



Tamas Almos Vami

CMS YSC Advisory Member

Postdoctoral researcher at
John Hopkins University