



Welcome!

from the *local organisers*



Tancredi
Carli



Dawn
Hudson



Alexander
Huss



Connie
Potter

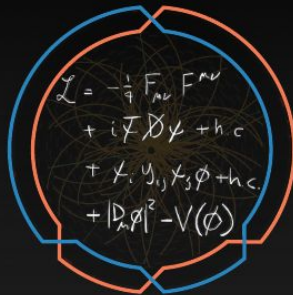
SM@LHC'22

CERN, Geneva, 11 – 14 April 2022

Higgs

QCD

Electroweak



Heavy Flavour

Top

EFT

International Organising Committee

- Juan Alcaraz
- Jeppe Andersen
- Mario Campanelli
- Tancredi Carli
- Vitaliano Ciulli
- Ayres Freitas
- Stefan Höche
- Eric Laenen
- Katharina Müller
- Aleandro Nisati

Local Organising Committee

- Tancredi Carli
- Dawn Hudson
- Alexander Huss
- Connie Potter



{ cern.ch/sm1hc2022 }

Hybrid format: both *in-person* (~50) as well as *on-line* (~150) participation

- Zoom connections details [here](#) (*passcode: registered participants & logged in*)
- First time for us to organise in this format
- Please provide us with feedback and suggestions

Program focussed in the afternoon: **12:30 – 18:45** (*note: 12:20 start on Thu!*)

- Recommended to go for early lunch (*R1 restaurant opens at 11:30*)
- Mornings free:
 - Catch other participants for discussions at e.g. R1, ...
 - Follow discussions on previous talks on mattermost (*next slide*)
 - Quiet place: library, ...
 - Visit CERN colleagues, ...

SM@LHC promotes discussions on Standard Model physics at the LHC with a focus on *hot topics* and *interesting connections* between Standard Model subfields.

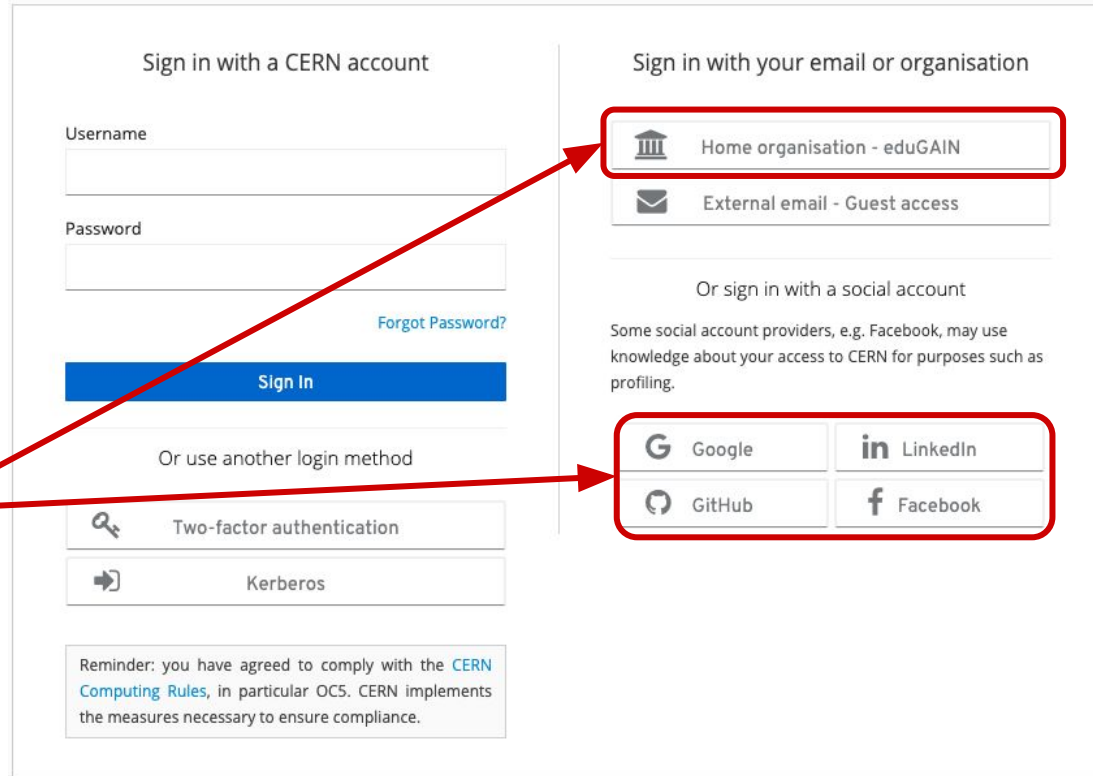
We will use the mattermost channel:

DISCUSSIONS (“town-square”)

at mattermost.web.cern.ch/smlhc2022
for discussions on the talks.

(do not use the zoom chat!)

- Registration link [here](#)
- Can use your **own institution login** or **social media accounts**



Sign in with a CERN account

Username

Password

[Forgot Password?](#)

Sign In

Or use another login method

Two-factor authentication

Kerberos

Reminder: you have agreed to comply with the [CERN Computing Rules](#), in particular OC5. CERN implements the measures necessary to ensure compliance.

Sign in with your email or organisation

Home organisation - eduGAIN

External email - Guest access

Or sign in with a social account

Some social account providers, e.g. Facebook, may use knowledge about your access to CERN for purposes such as profiling.

Google LinkedIn

GitHub Facebook

Please ask questions and contribute to the discussion after talks:

- Start your post with “**<title of the talk>:**” followed by the question/comment
- When answering/commenting on a specific post, please use the “**reply to**” option that appears on the top right of the post after hovering with the mouse.



Important Notes to *Speakers*

- Upload your slides **at least ONE DAY in advance**
(helps a lot in having focussed discussions!)
- Everything should be set up but please make sure that:
the slide upload on indico works, you can connect to mattermost, ...
Note: go to your contribution to find the upload button
(in case of problems, contact: [Alex|Tancredi] or the session chairs)
- The talks *(but not the Q&A)* are **recorded** and will be uploaded on indico
(in case you have not done yet, please sign the release form)
- **Please keep the time!**
(tight schedule; do not want to compromise on coffee break discussions)
- Connect to the **mattermost** channel *after your talk*
(answer questions there was no time for, follow up on discussions, ...)
- *For remote speakers:* please **connect 5–10 min before** your session to zoom to test the *screen sharing & audio* with the session chairs.



Conveners and Session Chairs

Big thanks to all conveners for coming up with an exciting program!

- Each session will be **co-chaired by two conveners**:
 - in-person:
moderate & take questions from the auditorium
 - on-line:
monitor mattermost for questions
& responsible for checking zoom sharing
with remote speakers in the break before
- Session chairs indicated as such on indico

QCD session

- Anna Kulesza (Theory)
- Francesco Giuli (ATLAS)
- Juan Pablo Fernandez (CMS)
- Lorenzo Sestini (LHCb)

EW session

- Stefan Dittmaier (Theory)
- Stefano Camarda (ATLAS)
- Paolo Azzurri (CMS)
- Will Barter (LHCb)

Top session

- Malgorzata Worek (Theory)
- Maria Moreno Lacer (ATLAS)
- Enrique Palencia (CMS)

Higgs session

- Michael Spannowsky (Theory)
- Karsten Köneke (ATLAS)
- Maria Cepeda (CMS)

EFT session

- Jordy de Vries (Theory)
- Hannes Mildner (ATLAS)
- Saptaparna Bhattacharya (CMS)

Heavy Flavour session

- Marzia Bordone (Theory)
- Alexis Pompili (CMS)
- Paula Alvarez (LHCb)

Young Scientists Forum—Tuesday 17:30

17:30	YSF - Ayres Freitas Juan Alcaraz Maestre (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT, Madrid)) (until 18:50) (500/1-001 - Main Auditorium)	2-
17:35	Mixed QCD-electroweak corrections to Higgs plus jet production at the LHC - Mr Marco Bonetti (RWTH University) (500/1-001 - Main Auditorium)	2-
17:45	Search for non-resonant Higgs bosons pairs production in the bbtatau final state at CMS - Jaime Leon Holgado (Centro de Investigaciones Energéticas Medioambientales y Tec. (ES)) (500/1-001 - Main Auditorium)	2-
17:55	Observation of VBS production in opposite-sign WW events at CMS - Bianca Sofia Pinolini (Universita & INFN, Milano-Bicocca (IT)) Bianca Sofia Pinolini (500/1-001 - Main Auditorium)	2-
18:05	Flavour Tagging with Jet Substructure - Simone Caletti (500/1-001 - Main Auditorium)	2-
18:15	Differential cross-sections for $t\bar{t} + X$ production at the LHC - Katharina Voss (University of Siegen (DE)) (500/1-001 - Main Auditorium)	2-
18:25	The Drell-Yan $q\bar{q} \rightarrow \gamma^*/Z$ Spectrum and Its Uncertainty at $\sqrt{s} = 13$ TeV - Johannes Michel (MIT CTP) (500/1-001 - Main Auditorium)	2-
18:35	A search for the dimuon decay of the Standard Model Higgs boson in pp collisions at 13 TeV with the ATLAS Detector - Ye Chen (Hefei University of Science and Technology of China) Ye Chen (University of Science and Technology of China (CN)) (500/1-001 - Main Auditorium)	2-

Platform for outstanding young scientists to promote their work and discuss their research findings in a series of short talks.

Prize for the most *clear* and *creative* presentation.



Selected by members of the international organising committee (IOC): (you can provide input via e-mail)

- Ayres Freitas <afreitas@pitt.edu>
- Juan Alcaraz <Juan.Alcaraz@cern.ch>

Winner will be announced before the first session on Thursday morning (12:20)!

Venue, Coffee Breaks, *Reception**

CERN map: [venue](#)

Room: **Main auditorium** (Mon, Tue, Thu); **Council chamber** (Wed)

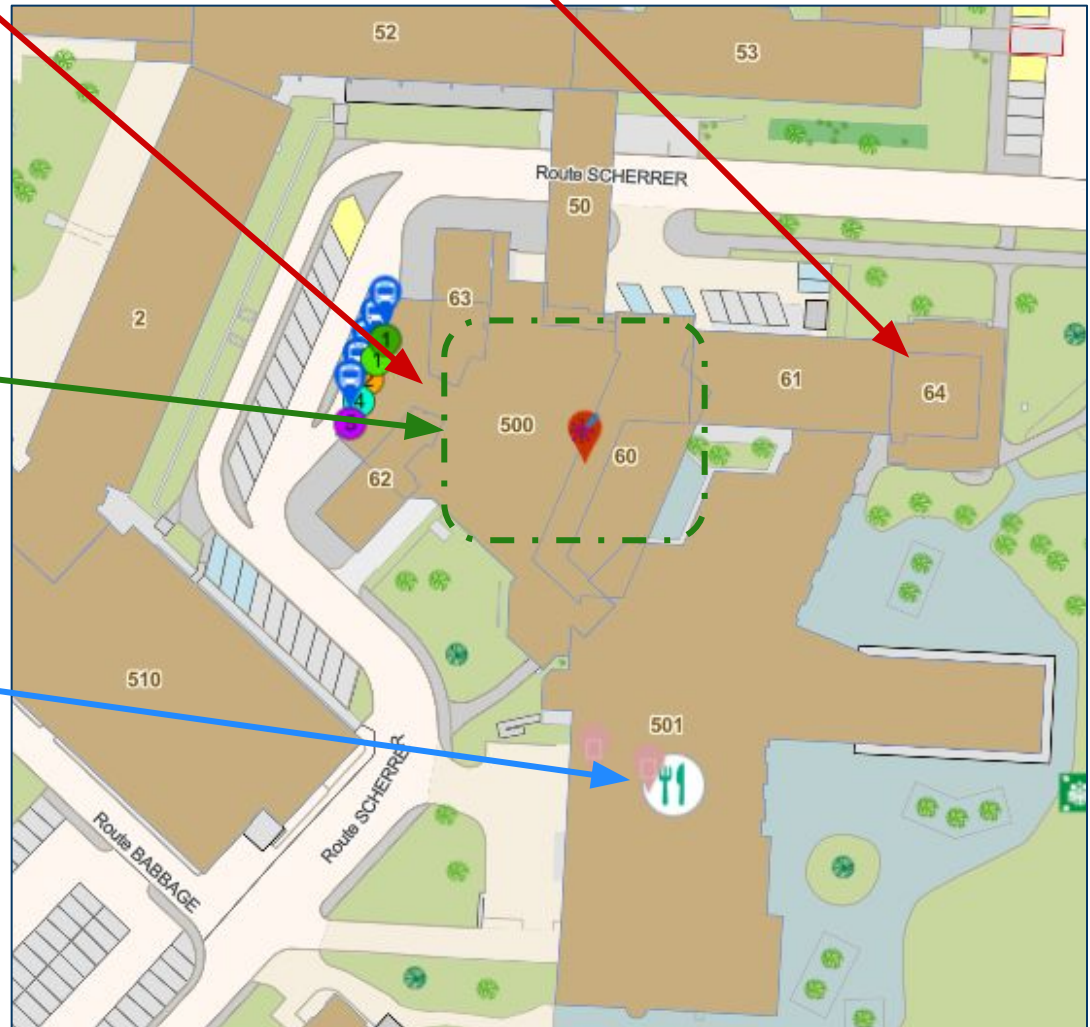
**Coffee breaks
& Reception** (Mon 19:00)
on mezzanine in front of
main auditorium

CERN Restaurant R1

Opening hours: 6:30–22:00

We recommend early lunch
11:30–12:30 (*avoid queues*)

* plenty of food & drinks

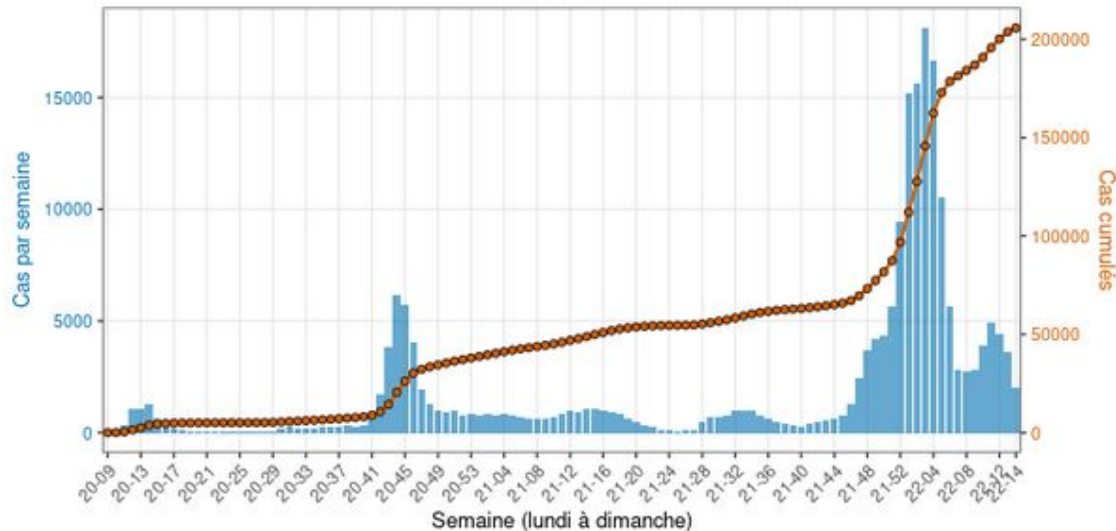


COVID-19 at CERN

Geneva

Nouveaux cas par semaine

Pour la période du 26.02.2020 au 08.04.2022, canton de Genève.



The virus is still circulating!

- Please stay safe
(keep distance, hand sanitisers, ...)
- Half capacity in all meeting rooms:
Respect seat configuration
- Masks not mandatory but please feel free to wear one for personal protection

Cases at CERN show similar trend as in Geneva.

CERN COVID information:

- COVID test can be booked via [PLAMED](#)
- If you have symptoms, declare yourself on [TRAMED](#)
- If you do not have a CERN account, contact [COVID helpline](#) (& inform organisers)

COVID measures in [Switzerland](#) and in [France](#)

Restaurants

[CERN Restaurant R1](#) open until 22:00

Around CERN: *(walking distance)*

Be aware of Swiss prices!

[Nirvana](#) Indian [4 min](#)

[Da Vinci](#) Take-away Pizza [11 min](#)

[La Meyrinoise](#) Traditional Italian restaurant [19 min](#)

[Luigia Academy](#) Modern Italian restaurant [25 min](#) *(take gate C → 10 min)*

[Champs Frechets Kebab](#) Ugly location but decent food. Prefer take-away. Crowded. [28 min](#)

[Marifah Thai](#) Thai food [20 min](#)

Some options in Geneva: *(with public transport)*

[Gazelle d'Or](#) African food, eat with hands only [24 min](#)

[Cave valaisanne](#) Traditional Swiss [31 min](#)

[Bains des Paquis](#) Fondue, Lake panorama, reservation only, take a jacket. [33 min](#)

[Vegan cafe](#) Excellent vegan food [35 min](#)

For those not having their own plans, we can organize a dinner in small groups (Tue and/or Wed).
If interested, contact Alex and Tancredi.

Wi-Fi Network

Follow instructions on: <https://information-technology.web.cern.ch/help/visitors>

Use “**CERN-Visitors**” network or “**eduroam**” (*provided by your home institution*)

If you have CERN computing account, register your laptop <http://cern.ch/register>

Visitors

Your main priorities are network connection and printing.

Network connection for your laptop

Please connect your device to the “CERN-Visitors” Wi-Fi network.

You should be redirected to the “CERN Visitor Wi-Fi” registration portal. If not automatically redirected (as this is device dependant), open a web browser and you will see the registration portal.

Via this portal, without any registration, you will have access to a limited number of publicly available CERN websites (“Public Links”). To get a full internet access, agree with the CERN computing rules and register for Internet access by providing you email and a mobile phone number to which an access code will be sent by SMS. Once registered, you will be able to access remote web sites (http and https) and some other services (e-mail, VPN, SSH).

Note that this “CERN-Visitor” service is linked with the Wi-Fi Service Enhancement project, and may not be available in all buildings. More details can be found [here](https://cern.ch/wifi-wise#Visitors) (<https://cern.ch/wifi-wise#Visitors>).

If you have eduroam account provided by your home institute, you can use this network to gain connectivity. To get a full internet access, choose eduroam network, agree with the CERN computing rules and follow displayed instructions.

In some places, CERN-Visitors SSID is not yet available. In such areas (if you don’t have eduroam account provided by your home institute), you can register your laptop and connect to the CERN network on a temporary basis.

We wish you a fruitful **SM@LHC 2022** workshop!



Group of volunteers collecting aid for Ukraine.
Donation box at registration desk, more information at aidforall.ch



Aid for All

Back up
