

# Welcome and Introduction

CHIPP/CHART Workshop on Sustainability in Particle Physics and CHIPP 2023 plenary

Armin Ilg, Ben Kilminster

14.06.2023

for the CHIPP ECR Organisers: Robert-Mihai Amarinei (UniGe), Lorenzo Giannessi (UniGe),  
A. I (UZH), Luca Sabato (EPFL), Jesse Zhang (ETHZ)  
and for CHIPP: Angela Benelli, B. K (UZH)  
and CHART: Lenny Rivkin (EPFL, PSI), Mike Seidel (EPFL, PSI)

# Welcome



Campus Sursee

# Previous workshops

- Yearly CHIPP Plenary, alternating stand-alone and at SPS meeting
- 2021: [stand-alone meeting at Seaside Hotel in Spiez](#)
  - 100 participants
  - Dedicated early-career researcher (ECR) sessions
- CHIPP ECR Liaisons ([CHIPP-ECR-Liaisons@cern.ch](mailto:CHIPP-ECR-Liaisons@cern.ch)): Robert-Mihai Amarinei, A.I,
- CHIPP ECR supporters ([CHIPP-ECR-supporters@cern.ch](mailto:CHIPP-ECR-supporters@cern.ch))
- 2022: [CHIPP Plenary at SPS in Fribourg](#), with early-career researcher (ECR) session



CHIPP Plenary 2021 in Spiez

This year: Addressing both CHIPP and CHART, one day solely on **sustainability**, with ECR (and plenary) poster sessions and flash talks

# Context of this workshop

- Motivated by the [International Year of Basic Sciences for Sustainable Development 2022/2023](#)
- Idea to organise a workshop on sustainability in particle physics research in Switzerland
- Ideal to have linked to CHIPP Plenary 2023, jointly with CHART (Swiss Accelerator Research and Technology)
- [Proposal to SCNAT](#) by Robert-Mihai Amarinei (UniGe), Lorenzo Giannessi (UniGe), A.I (UZH), Luca Sabato (EPFL), Jesse Zhang (ETHZ), with the help of Angela and Michele
- Implementing feedback from CHIPP Plenary in 2021 (Spiez): Less flash talks, keep (young) poster session, more time to socialize and explore site



## Formular A) Tagungen/Kurse 2023

Plattform: [MAP](#)  
Organisationseinheit: [CHIPP](#)

1. Tagungstitel - **bitte in Excel-Liste übertragen:** CHIPP/CHART Workshop on Sustainability in Particle Physics  
Datum: 14-16. Juni 2023  
Ort: Campus Sursee, Sursee, Schweiz
2. Hauptthema: Sustainability/Nachhaltigkeit
3. Nebenthemen: Teilchenphysik, Beschleunigerphysik
4. Wissenschaftliche Bedeutung des Anlasses\_Der Anlass ist Teil des CHIPP Annual meeting 2023 und wird dieses um einen Tag verlängert (dies statt zwei Tagen)  
Zielpublikum: Masterstudenten, Doktoranden, Postdocs, permanente Wissenschaftler und Vertreter der Industrie tätig in der Teilchenphysik oder Beschleunigerphysik
5. Art der Veranstaltung (Workshop, Symposium, etc.): [Symposium](#)  
Anzahl Teilnehmer (geschätzt bzw. erwartet): [70](#)  
 öffentlicher Anlass  
 auf Einladung
6. Veranstalter:  
Name, Vorname: [Ilg, Armin](#)  
Titel: [Dr.](#)  
Institut/Firma: [Physik-Institut, Universität Zürich](#)  
Adresse: [Winterthurerstrasse 190](#)  
PLZ, Ort: [8057 Zürich](#)  
Telefon: [079 907 55 70](#)  
E-Mail: [armin.ilg@physik.unizh.ch](mailto:armin.ilg@physik.unizh.ch)

7. Mit-Organisator: [Robert-Mihai Amarinei \(Université de Genève\), Jesse Zhang \(ETHZ\), Lorenzo Giannessi \(Université de Genève\), Luca Sabato \(EPFL\)](#)

Excerpt from workshop proposal



# Workshop structure: Wednesday

## Focusing fully on sustainability in particle physics research

Wed 14/06	Thu 15/06	Fri 16/06	All days
REGISTRATION 10:00 - 10:30			
Introduction to Sustainability: Introduction and goals of the workshop 10:30 - 10:35			
Introduction to Sustainability: Introductory talk about Sustainability 10:40 - 11:10			
Sustainability in particle physics and industry: Sustainability in particle physics research 11:15 - 11:45			
Sustainability in particle physics and industry: Sustainability in accelerator physics research 11:50 - 12:20			
Sustainability in particle physics and industry: Short talk: HTS FCC-ee energy efficient beam optics Croatia/ Garcia Jalmer 12:25 - 12:35			
LUNCH 12:40 - 14:00			

14:00	Sustainability in particle physics and industry: Role of science for a sustainable society 14:00 - 14:30
	Sustainability in particle physics and industry: Start-up: Transmutex 14:35 - 14:45
15:00	Sustainability in particle physics and industry: Sustainability in industry 14:50 - 15:20
	Sustainability in particle physics and industry: CIPEA - CERN Innovation Programme on Environmental Applications 15:40 - 16:30
16:00	Coffee break 16:15 - 16:45
	Introduction to Sustainability: Sustainability efforts in space research 16:50 - 17:45
17:00	Discussion: Panel discussion with speakers 17:50 - 18:35
18:00	CHPP Plenary: CHPP Prize 2023 18:45 - 19:45
19:00	DINNER 19:00 - 20:00
	Discussion: Bar discussion with the panelists

Panel discussion with speakers. Submit questions/discussion points already now!



Or use [this link](#)

Only a small glimpse into sustainability efforts, check for example the [Sustainable HEP - 2nd edition](#) from Sep. 2022, [Environmental sustainability in basic research](#), [A perspective from HECAP+](#) that you can endorse as well, and many many other efforts!

# Workshop structure: Thursday

## Future collider and CHIPP sessions, excursion related to sustainability, ECR poster sessions

Wed 14/06 Thu 15/06 Fri 16/06 All days

Print PDF Full screen Detailed view Filter

09:00	Future colliders: Overview on future collider options	Daniel Schulte	09:00 - 09:15
	Future colliders: Physics motivation for future colliders	Rebecca Gonzalez Suarez	09:20 - 09:45
	Future colliders: Accelerator R&D for future colliders	Dr Tatiana Pieloni	09:50 - 10:15
	Future colliders: The CHEP proposal on experimental and theoretical foundations for FCC	Ben Kilminster	10:20 - 10:30
	Coffee Break		10:30 - 11:00
11:00	CHIPP: CMS/ATLAS physics highlights	Florencia Canelli	11:00 - 11:20
	CHIPP: Low-energy physics at PSICERN	Anna Soper	11:20 - 11:40
	CHIPP: Physics with forward and fixed target experiments at CERN	Anna Styris	11:40 - 12:00
12:00	CHIPP: Neutrinos	Davide Spillatone	12:00 - 12:25
	CHIPP: Theory: The Higgs boson and the top quark: precision theory for the LHC and beyond.	Maksimilian Grelatz	12:25 - 12:50
13:00	LUNCH		12:55 - 13:55

14:00	Excursion: Walk to "Haus des Holzes"		14:00 - 14:30
	Excursion: Presentation (English)		14:30 - 15:30
15:00	Excursion: Guided tour through "Haus des Holzes" (German)	Excursion: Guided tour through "Haus des Holzes" (English)	15:30 - 16:30
16:00	Excursion: Walk back to Campus Sursee		16:30 - 17:00
17:00	CHIPP: Board	ECR: ECR poster session	17:00 - 18:45
18:00	DINNER		18:45 - 19:45
19:00			
20:00	CHIPP/CHART: Poster session		



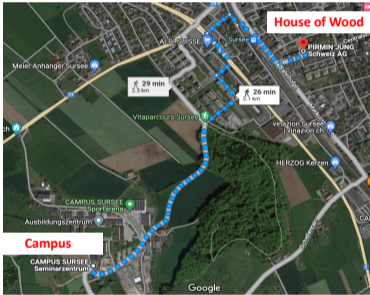
Haus des Holzes

# Excursion: How to get to *Haus des Holzes*

Walk: Leave here at 13:50!

Walking to House of Wood

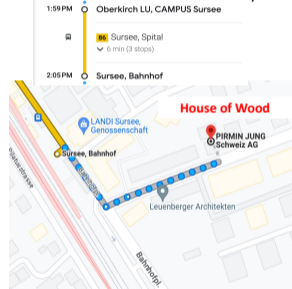
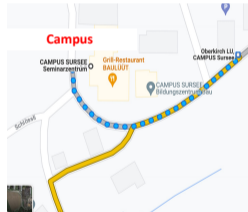
- About **2km (30 min)** from Campus to House of wood
- Straight road from Campus up to main road
- Then cross big road towards the **train station**.
- From **train station** turn **right** and then **left**



Public transport: Bus leaving at 13:59

How to get to House of Wood (House des Holzes)

1. Take **bus 86** (direction sursee, Spital)
2. Get off the bus after **3 stops** at **"Bahnhof"**
2. Walk 200 m to House des Holzes



Coming back: Bus leaving Sursee train station at 16:52

# Workshop structure: Friday

## CHIPP Plenary, poster prize and ECR flash talks

Wed 14/06 Thu 15/06 **Fri 18/06** All days

Print PDF Full screen Detailed view Filter

Session legend

CHIPP ECR

09:00	CHIPP: PLENARY	
		09:00 - 10:30
	Awarding of Poster prize	10:30 - 10:45
11:00	Outer Barrel services chain characterization for the ATLAS ITk Pixel Detector	Saba Mobius 10:50 - 11:05
	Measurement of the tau g-2 in ultraperipheral PbPb collisions at the CMS experiment	Arash Juhász 11:05 - 11:20
	Searching for Low-Mass Resonances Decaying into W Bosons	Giuglielmo Colobetti 11:20 - 11:35
	Asymmetric Di-Higgs Signals of the N2HDM	Dr Sunil Banik 11:35 - 11:50
12:00	The NA62 experiment	Alina Klemencovic 11:50 - 12:05
	Search for the muon electric dipole moment using the frozen-spin technique	Dr Philipp Schmid-Wendler 12:05 - 12:20
	SoLAR	Saba Parsa 12:20 - 12:35
13:00	LUNCH	



City of Sursee



Sempachersee (CC BY-SA 3.0)

Could use the afternoon to go to the lake and enjoy the nice weather!

If you are interested in Swiss apple juice, there is also the [Ramseier Erlebniswelt](#) to visit ;-)

# Enjoy the workshop!



Campus Sursee