General Assembly Meeting of the Physik-Institut

- 1. New Personnel
- 2. In Memoriam
- 3. Congratulations
- 4. Decision-making structure of the institute
- 5. Strategic planning of the institute
- 6. New PhD Regulations
- 7. Buildings
- 8. Air Travel
- 9. Outreach
- 10. Varia

New Personnel – SNF Professors

SNF professor Tomáš Bzdušek

New paradigms for topological matter: delicate, multi-gap, hyperbolic



New Personnel – SNF Professors

SNF professor Max Zoller

High-precision scattering Amplitudes for the LHC and lepton colliders from automated NNLO calculations



New Professor – Marcelle Soares-Santos

Starting in January

research focus on the nature of the accelerated expansion of the universe and gravitational waves



New Professor – Bjoern Penning

Starting in January

Searches for Dark Matter with the LZ experiment



New members, group Gehrmann







Pjotr Bargiela Postdoc

Giulio FalcioniPostdoc

Florian Lorkowski
Postdoc

New members, group Isidori







Sebastiano Covone PhD

Gioacchino PiazzaPostdoc

Emanuelle PinsardPostdoc

New members Grazzini



Paolo Garbarino PhD



Stefan Kallweit Senior Scientist

New members, group Neupert



Kouta Dagnino PhD



Sophie Castro Holbaek PhD



Midori Pittini Assistent

New members, group Bzdušek



Zoltan Guba PhD



Patrick Lenggenhager Postdoc

New members, group Pozzorini



Nicolo Giraudo PhD



Florian Herren Postdoc

New members, group Zoller, Jetzer & Natterer



Fabian Lange
Postdoc
Group Zoller



Cecilio Garcia
Postdoc
Group Jetzer

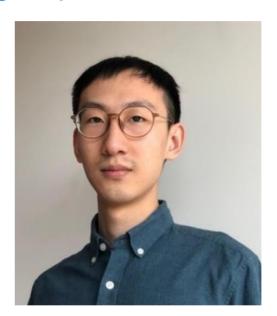


Ajla KaricPhD
Group Natterer

New members, group Greber



Kamil Dwinger Technician



Lebin YuAssistant

New members, group Kilminster



Vagelis GkougkousisPostdoc



Anson Kwok PhD



Fanqiang Meng PhD

New members, group Chang, Canelli & Schilling



Karin von Arx Postdoc

Group Chang



Giovanni Celotto PhD

Group Canelli



Noah Brugger Assistant

Group Schilling

New members, group Serra



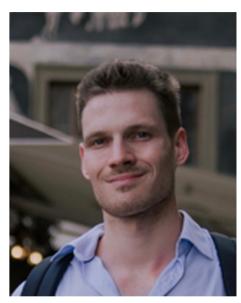
Thomas Lehéricy Postdoc



Gerardo Vasquez Senior Scientist



Shah Rukh Qasim Postdoc



William Sutcliffe
Senior Scientist

New members, group Baudis



Aravind Remesan Sreekala PhD



Francesco Piastra Technician

New members, Administration & Workshop



Markus EhrleFinance Administration

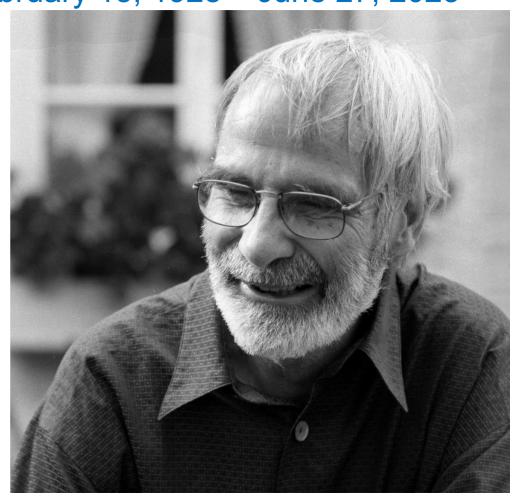


Ryan MorfWorkshop Apprentice

In Memoriam Franz Waldner, February 13, 1928 – June 27, 2023

Professor for experimental physics 1958 – 1994

- Electron Spin Resonance for measurements
 - of paramagnetic ions to probe single crystals
 - determine the structure of condensed matter
 - quasi two-dimensional magnets
- > Research on
 - Superconductivity
 - Quantised Lattice Vibrations
 - Spinors, Skyrminons and Solitons



Congratulations!

Huanyao Cun
 Plenary Talk at Graphene Week

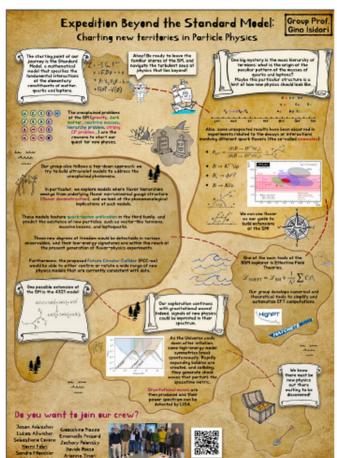
Marino Missiroli
 elected as Trigger Coordinator of the CMS
 experiment

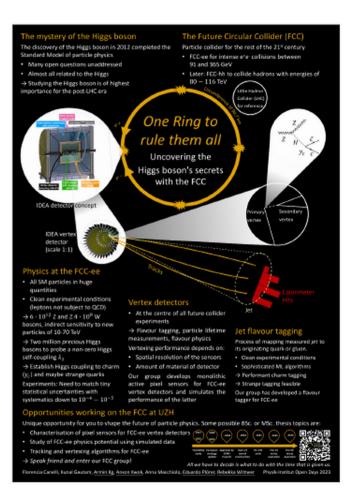




Poster Prize!



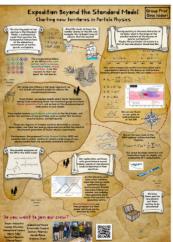




Poster Prize!

- Ilya Charaev, Noah Brugger, Severin Nägeli
 Quantum sensor cryogenic search for dark matter in-light mass range
- Armin Ilg, Anson Kwok, Eduardo Plörer, Rebekka Wittwer
 One Ring to rule them all Uncovering the Higgs boson's secrets with the FCC
- Arianna Tinari, Noemi Fabri
 Expedition beyond the standard model: charting new territories in particle physics







Best master theses!

Dectris prize for the best experimental physics master thesis

Livio Redard-Jacot

Search for Radiation from Wave Function Collapse and Electric Field Characterization in XENONnT

Soluyanov prize for the best theoretical thesis

Mohammad Alminawi

Composite Nambu-Goldstone Higgs Models



General Institute Ass

Decision making structure of the institute

Institute regulations of 25.11.2022 (in German):

https://www.physik.uzh.ch/dam/jcr:7ef2a9fb-e0f1-4869-8702-8b62f0922fb3/Institutsordnung PhysikInstitut2022.pdf

- Institute directorate: Thomas Gehrmann (director), Laura Baudis (co-director)
 Katharina Müller (managing director)
 responsible for daily operation of institute supported by administrative personnel
- Professors' meeting: all independent group leaders, meets monthly
- Institute assembly (professors and representatives of the bodies)
 two meetings a year + on demand
- Management board: all tenured professors, meet on demand
- Long-term professorial planning: EFP (Entwicklungs- und Finanzplan) process Institute annually proposes rolling five-year strategy for future professorships

Decision making structure of the institute

Representatives of the corporate bodies https://www.physik.uzh.ch/de/institut.html:

- ATP (administrative and technical personnel)
 Achim Vollhardt, Paul Käser
- WNW (scientific personnel: PhDs and postdocs)
 Marta Babicz (Postdoc), Nicolo Giraudo (PhD)
- FFL (scientific personnel: senior scientist and lecturers)
 Mark Fischer, Michelle Galloway
- Students:
 Lisa Büchi, Thamayanth Kanagalinga

Strategic planning of the institute: professorships

Input to the 2024 EFP (Entwicklungs- und Finanzplan) process:

two requests for professorships

[MS1] Theoretical condensed matter physics

[MS2] Muon spin rotation, jointly with PSI

New Employment Conditions for PhD students as of 1/1/2024

- Official workload 80% (now 60%) + additional 20% unpaid increase 60 → 80% with no additional payment, consistent with SNF regulations
- Protected time 3.5 d (+1 d) → 0.5 d/week for teaching or other work for their qualification (750 h in 4 years)
- Individual outlines of rights and responsibilities (Pflichtenheft) and doctoral agreements are mandatory

PI will set up new forms for individual outlines of rights and responsibilities (Pflichtenheft) and doctoral agreements

Existing contracts will be changed within 2024

What activities fall under protected time?

Protected time includes all research work that is necessary and desirable to achieve the qualification goal, such as

- data collection and analysis not necessary the data you are working with eg for big experiment
- service tasks for the experiment
- maintaining software packages specific to your analysis
- writing the dissertation
- participating in workshops and conferences
- attending seminars
- curricular achievements in the context of a doctoral degree
- supervision of bachelor and master theses that are closely related to own research topic
 - → details in individual outlines of rights and responsibilities

Teaching and other tasks

0.5 days per week in average for teaching and other tasks (750 h in 4 years), partly also in 20% extra time

- teaching 420 hours → in the semester about 1 full day
- collaboration in other research projects
- scientific contributions that are not in the research context of your own dissertation
- · methodological or technical support of other persons from the scientific community,
- · activity in university committees and commissions
- counselling and supervision of students if not in the context of the own work
- Outreach
- https://www.graduates.uzh.ch/de.html

Building 56 was renovated:

- Installation of clean room for CMS detector assembly
- Labs for smaller scale experiments (high-field magnets, vibration-free tables)



Schedule

Start renovation: spring 2023

Phase 1 finished: end of 2023

Clean room ready: Feb 2024

Start Phase 2: 2026

Phase 2 finished: 2027





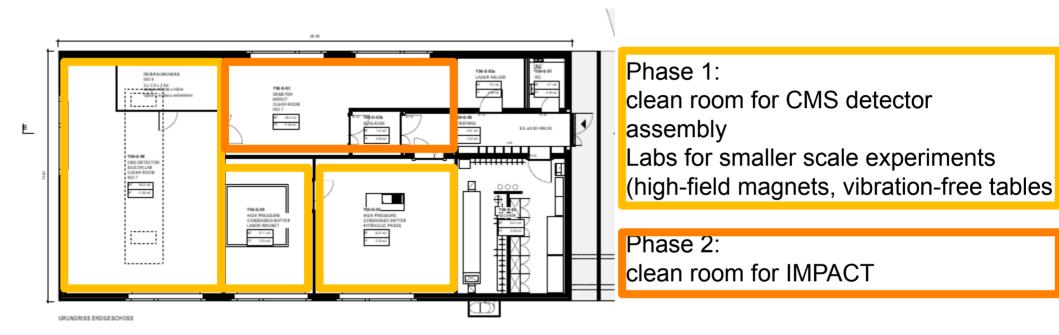








General Institute Assembly 11/12/2023



Space on Irchel campus remains very tight, no new space before 2030





Video:

https://uzh.mediaspace_cast_switch_ch/media/Y/562roof/0_dx0nc821/12627

Air travel

- UZH sustainable-development goals: climate neutrality by the year 2030 largest single source of CO₂: business-related air travel
- objective for 2022: reduce to 60% of 2019 status, then further -3% annually 2022/23 data gathering, reduce air travel where possible
 - detailed central monitoring of air travels (hand in boarding pass!)
 - all travels that are paid for to at least 50% through UZH are counted including third-party funds and paid visitors
- MNF guidelines
 - no business class
 - use the train for all destinations reachable within 6 hours
- UZH goals were met in 2022, but not for MNF → new MNF rules for 2024

Air travel Physics Department

Oct 2022- Sept 2023

				European				Intercontinental			
	Senior PD)	PhD	Senior	PD	PhD	Guests	Senior	PD	PhD	Guests
	47	41	73	39	50	40	28	16	20	21	5
Summary				0.83	1.22	0.55		0.34	0.49	0.29	
				157				62			

- PhDs travel more than 1 intercontinental flight in 4/y
- Postdocs and Seniors travel less than 1 intercontinental flight per year
- Still above UZH CO₂ goal
 - → PI typical rules: 1 IC flight/ PhD in 4 y, 0.5 IC flight/ Senior, PD/y

Air Travel – MNF rules as of 1/1/2024

MNF CO₂ tax model

- 1) Pay tax based on (central) UZH data.
- 2a) All flights are taxed at 200 CHF / ton-CO₂ invoiced to the groups
- 2b) 20% is kept by the department a justice fund, the other 80% goes to a central MNF pool
- 3) Bill is made twice a year first bill in January 24
- 4) All train travel (above 100 CHF/ ticket) from Jan 2024 should be invoiced to a central MNF sustainability account

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Physics: emissions in 2022 172.9 tons CO2 \rightarrow 34'572.- taxes 2023 99.4 \rightarrow 19'880.- (January-June only)
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Outreach

- Send input for social media, website and screen to <u>outreach@physik.uzh.ch</u>
- New exhibition on gravitational waves in the Science Pavilion
 Once per month: guided tours through the physics exhibition
- September: <u>Exhibition</u> and Symposium to Commemorate K. Alex Müller







Outreach

- Scientifica 2023
- Women in Physics Career Event at SPS meeting
- Open Days with 37 posters







Varia

- Schrödinger Colloquium: is the main physics colloquium event at UZH, talks are accessible to all groups and to undergraduates!
- Buildings 32 and 34 are converted as temporary space for schools starting next summer: 2000 high-school students on the campus
- MNF Science & Nature Festival 2024, June 8
 do you wish to contribute with tours, experiments,
 workshops, performances ...?
 contact Katharina

