

GEOTWINS Kick-off Meeting

20 - 21 January 2025, Zürich, Switzerland

GEOTWINS project	
Project acronym	Digital Twin Components for Deep Geothermal Energy Power and Heat Generation
Date	20.01.2025 – 21.01.2025
Venue	ETH Zürich Main Campus, NO Building, Room D45

Dear GEOTWINS participants,

We are happy to share with you the final agenda for the 2 days meeting on 20-21 January in Zürich!

This workshop will officially kick off the GEOTWINS project. This is the time to get to know each other better, to discuss the individual goals, starting points and refine our common workplan.

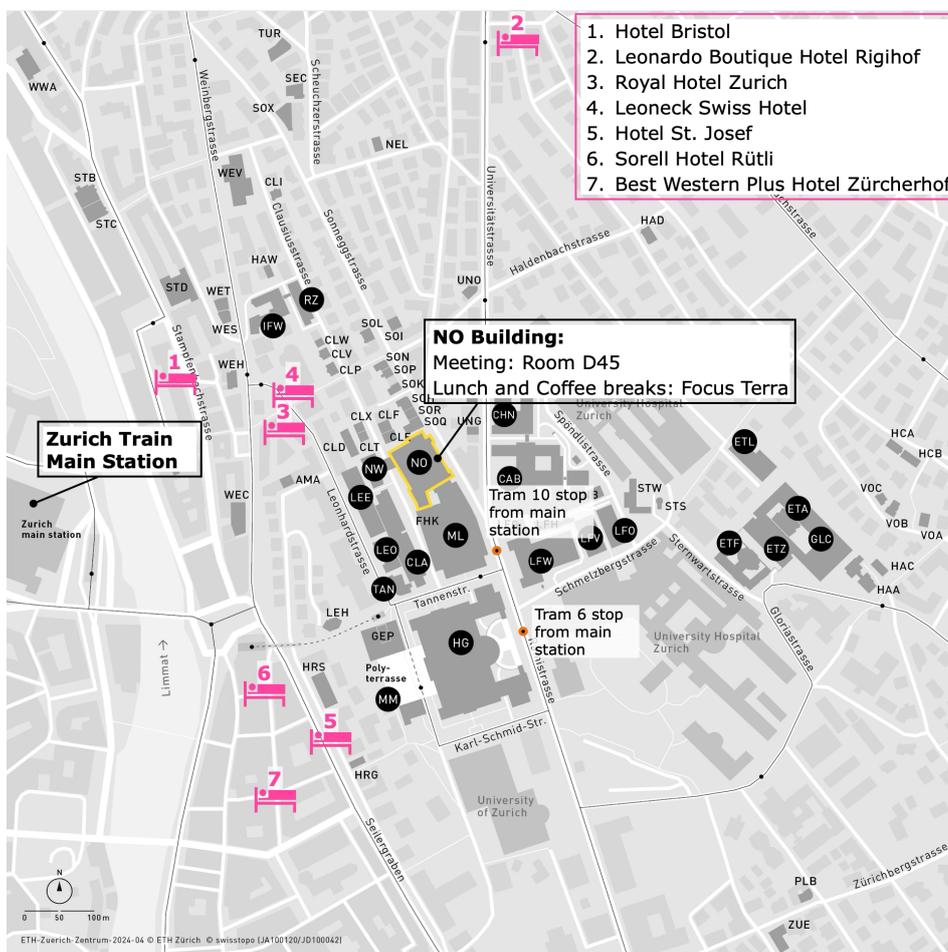
To meet these goals, we plan short presentations that look back and look forwards, interactive, and cross-cutting discussion rounds. The next few pages explain the locations of the venue and events as well as include a list of hotels nearby. For the actual agenda, please jump to page 4. Your feedback and suggestions are highly appreciated.

Looking forward to seeing you all in Zürich!

Federica, Stefan & Laura

This research was funded by the CETPartnership, under the Joint Call 2023. The CETPartnership's research projects are co-funded by the European Commission (Grant Agreement No. 101069750) and the national funding organizations listed on the CETPartnership website.

Location of Venue on Map



Location & Transportation

Venue: ETH Zürich, NO Building, Room D 45

Address: Sonneggstrasse 5, 8092, Zürich, Switzerland

How to find us: <https://eaps.ethz.ch/en/department/location.html>

List of Accommodations options near the event venue

There are many hotels or Airbnb in Zürich, and most of you prefer to book online. We have not made reservation, but we do list a few hotels that are well located. All of the following accommodations are available at booking.com or other search engines:

1. Hotel Bristol
2. Leonardo Boutique Hotel Righof
3. Royal Hotel Zürich
4. Leoneck Swiss Hotel
5. Hotel St. Josef
6. Sorell Hotel Rütli
7. Best Western Plus Hotel Zürcherhof

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Social Event on Day 1: Dinner at Restaurant Bamboo-Inn

Address: Culmannstrasse 19, 8006 Zürich

Website: <https://bamboo-inn.ch/>



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Program (All times Central European Time)

Day 1 - Monday 20 January 2025

14:00 - 14:10	Welcome, Opening Remarks	Stefan Wiemer
14:10 – 14:20	CETPartnership talk?	TBD
14:20 – 14:40	Project management and reporting	Laura Gulia (ETH)
14:40 – 15:00	DEEP legacy	Federica Lanza (ETH)
15:00 – 15:15	DT-GEO prospective	Johannes Kemper (ETH)
15:15 – 16:15	What is a digital twin? How do we plan to integrate DTCs? + <i>Breakout sessions</i>	Michael Afanasiev, Christian Boehm (MONDAIC) + all
16:15 – 16:45	<i>Coffee break</i>	
16:45 – 17:00	Debriefing on findings from breakout sessions	all
WP1: Seismic Monitoring and imaging (Lead: Francesco Grigoli & Federica Lanza)		
Presentations by Work Package: <ul style="list-style-type: none"> • Include people involved • Present scientific interests for each task • Present scientific highlights on previous work • What do we want to achieve in GEOTWINS? • What do we need from other WPs/tasks and, roughly, by when? • How can/should our work contribute to other WPs/tasks? 		
17:00 – 18:00	17:00 Introduction to WP1 objectives (Federica Lanza) 17:05 Task 1.1 – Francesco Grigoli (SEISMIX) 17:15 Task 1.2 – Francesco Grigoli (SEISMIX) 17:25 Task 1.3 – Christian Boehm/Michael Afanasiev (MONDAIC) 17:35 Task 1.4 – Arnaud Mignan (MignanRiskAnalytics/ETH) 17:45 Task 1.5 – Jean-Baptiste Tary (DIAS) 17:55 Discussion and Q&A session <i>*format: 10-min slots for each task including time for questions</i>	
18:30 – 21:00	Organized Dinner: Restaurant Bamboo-Inn	

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Day 2 - Tuesday 21 January 2025

8:30 – 9:00	<i>Coffee/ light breakfast</i>
Presentations by Work Package: <ul style="list-style-type: none"> • Include people involved • Present scientific interests for each task • Present scientific highlights on previous work • What do we want to achieve in GEOTWINS? • What do we need from other WPs/tasks and, roughly, by when? • How can/should our work contribute to other WPs/tasks? 	
WP2: Digital Geothermal Reservoir Twin (Lead: Antonio Rinaldi & Claudia Finger)	
9:00 – 10:00	9:00 Introduction to WP2 objectives - Antonio Rinaldi (ETH) 9:05 Task 2.1 – Edoardo Pezzulli (Sustain/ETH) 9:15 Task 2.2 – Luigi Passarelli (INGV) 9:25 Task 2.3 – Claudia Finger (IEG) 9:35 Task 2.4 – Andres Alcolea (GES) 9:45 Task 2.5 – Marco Broccardo (UNITN) 9:55 Discussion and Q&A session <i>*format: 10-min slots for each task including time for questions</i>
WP3: Hazards, Vulnerability, and Risk Analysis (Lead: Cecilia Nieves & Marco Broccardo)	
10:00 – 11:00	10:00 Introduction to WP3 objectives – Cecilia Nieves (GFZ) 10:07 Task 3.1 – Ryan Schultz (ETH) 10:17 Task 3.2 – Cecilia Nieves (GFZ) 10:27 Task 3.3 – Cecilia Nieves (GFZ) 10:37 Task 3.4 – Marco Broccardo (UNITN) 10:47 Discussion and Q&A session <i>*format: 10-min slots for each task including time for questions</i>
11:00 – 11:30	<i>Coffee break</i>
WP4: Visualization and decision-making tools (Lead: Jean Schmittbuhl & Michele Marti)	
11:30 – 12:30	11:30 Introduction to WP4 objectives – Jean Schmittbuhl (EOST) 11:35 Task 4.1 – Michèle Marti (ETH) 11:45 Task 4.2 – Michèle Marti (ETH) 11:55 Task 4.3 – Jean Schmittbuhl (EOST) 12:05 Discussion and Q&A session <i>*format: 10-min slots for each task including time for questions</i>
12:30 – 13:30	<i>Lunch break: organized lunch in NO D45</i>
WP5: Computational infrastructure and Digital Integration of DTCs (Lead: Christian Boehm)	

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13:30 – 14:30	13:30 Introduction to WP5 objectives – Christian Boehm (MONDAIC) 13:35 Task 5.1 – Michael Afanasiev (MONDAIC) 13:45 Task 5.2 – Michael Afanasiev (MONDAIC) 13:55 Task 5.3 – Michael Afanasiev (MONDAIC) 14:05 Discussion and Q&A session <i>*format: 10-min slots for each task including time for questions</i>	
WP6: Validation and demonstration in operational environments (Lead: Andres Alcolea)		
14:30 – 15:30	14:30 Introduction to WP6 objectives and tasks 6.1, 6.2 and 6.3 – Andres Alcolea (GES) 14:40 Individual presentation of sites <ul style="list-style-type: none"> • <i>Haute-Sorne</i> – Andres Alcolea/Peter Meier (GES) • <i>Utah FORGE</i> – Andres Alcolea/Peter Meier (GES) • <i>Beaver County FERVO</i> – Andres Alcolea/Peter Meier (GES) • <i>Bedretto</i> – Antonio Rinaldi (ETHZ) • <i>Soultz-sous-Forets</i> – (EOST/ITES) • <i>Rittershoffen</i> – (EOST/ITES) • <i>Vendendeim</i> – (EOST/ITES) • <i>Balmatt</i> – Ben Laenen (VITO) • <i>Larderello</i> – (SEISMIX) • <i>Weisweiler</i> – Claudia Finger (IEG) • <i>Dublin city center</i> – (DIAS) 15:15 Wrap-up: Summary of DTCs used in each site and in WP6, and next steps 15:20 Q&A session	
15:30 – 16:00	<i>Coffee break</i>	
16:00 – 16:30	Cross work-packages coordination	all
16:30 – 17:00	Tools, Website, Logo, next Meetings	Laura Gulia/ Stefan Wiemer

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