

# AWESCO Kick-Off Week

Oral Presentation Skills, Internal Research Review, and Project Management & Strategic Skills

University of Freiburg, February 29 - March 4, 2016  
Room 02-016/18, Georges-Köhler-Allee 101, Freiburg 79110, Germany



## Welcome to Freiburg and the AWESCO Kick-Off Week!

The aim of this week is to allow all of the members of the AWESCO initial training network to meet and discuss the upcoming research projects. Further, two courses are offered to the AWESCO early-stage-researchers to facilitate their research and professional development.

This kick-off week includes:

1. An **Oral Presentation Skills** course, given by Gregg Dubow (ALUFR)
2. The first of the **Internal Research Reviews**
3. A **Project Management & Strategic Skills** course, given by Ni Yan (TUD) and Roland Schmehl (TUD).

We welcome all of the 30 participants - AWESCO partners, early-stage-researchers, and associate researchers - to an exciting week!

The ALU-Freiburg AWESCO team

## Public Transportation

Public transportation in Freiburg is all run by VAG (Freiburg Verkehrs AG). The tram, bus, and local rail system all have the same tickets. A one-way ticket within the city costs 2,20€. A cheaper option if you are planning on taking multiple trips is to buy 2 x 4-Fahrten-Karte. This costs 14,40€ and gives you 2 tickets with 4 rides possible on each. You must punch the Fahrkarte in the machine once you board the vehicle. Transfers are allowed on the same ticket within a one-hour period. Tickets can be bought on buses or at ticket machines around the city.

## Internet

You can access the internet via eduroam or ask us for temporary log-in details. (For the second option, you need to download a VPN from the following website:

[https://www.rz.uni-freiburg.de/services/netztel/wlan-vpn/vpn-clients?set\\_language=en](https://www.rz.uni-freiburg.de/services/netztel/wlan-vpn/vpn-clients?set_language=en))

## Eating Out

We have a (self-payment) reservation every day during the kick-off week at the Fraunhofer Institute Solar-Info-Center canteen (Emmy-Noether-Straße 2). On Wednesday 2nd March, we have a reservation for the official dinner at Das Kartoffelhaus (Basler Straße 10) at 19:30.

## Contact Information

Should you encounter any problems, please feel free to contact Rachel (+49 017 810 841 81) or Christine (+49 176 988 345 70).

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# Internal Research Review Talks

## Work Package 1: "Modelling & Simulation" - Roland Schmehl (TUD)

1. "FSI simulations on kites" - Mikko Folkersma (TUD)
2. "Durable Structural Reinforcements of Large Scale Fabric Kites" - Paul Thedens (Skysails)
3. "An efficient inexact NMPC scheme with stability guarantees" - Thomas Haas (KUL)

## Work Package 2: "System Design & Optimisation" - Moritz Diehl (ALUFR)

4. "Optimal Control of Dual Kites in Pumping-Cycle Operation" - Rachel Leuthold (ALUFR)
5. "Ground Station Design and Optimization for Airborne Wind Energy" - Mahdi Salari (UL)
6. "Multi-Disciplinary System Design, Safety and Cost Optimisation of AWE" - Ashwin Candade (Enerkite)
7. "Grid Integration of Airborne Wind Energy Systems" - Elena Malz (CHAL)

## Work Package 3: "Sensors & Estimation" - Jeroen Hol (Xsens)

8. "An efficient inexact NMPC scheme with stability guarantees" - Andrea Zanelli (ALUFR)
9. "Moving Horizon Estimation for 3D Motion Tracking" - Fabian Girrbaach (Xsens)
10. "Estimation and Control of Periodic Orbits" - Peter Listov (EPFL)

## Work Package 4: "Control Systems" - Christoph Hackl (TUM)

11. "Low-level fault-tolerant control of the AWE electric drive system" - Hisham Eldeeb (TUM)
12. "Modeling Dynamics of the Ampyx AWE System for Launch and Land Optimization" - Jonas Koenemann (Ampyx)
13. "Robust Automatic Operation of Inflatable Tethered Wings for Power Generation" - Sebastian Rapp (TUD)
14. "Current research at ETHZ on control design for tethered wings for AWE" - Eva Ahbe (ETHZ)

### AWESCO Kick-Off Week Schedule

Time	Mon	Tue	Wed	Thu	Fri	Sat
9:00 AM	Oral Presentation Skills	Oral Presentation Skills	WP1	WP3	Project Management Skills	Black Forest Hike***
10:00 AM			1: Mikko Folkersma (TUD)	8: Andrea Zanelli (ALUFR)		
			2: Paul Thedens (Skysails)	9: Fabian Girschbach (Xsens)		
11:00 AM	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
	Oral Presentation Skills	Oral Presentation Skills	WP2	WP4	Project Management Skills	
4: Rachel Leuthold (ALUFR)			11: Hisham Eldeeb (TUM)			
12:00 PM	Lunch	Lunch	5: Mahdi Salari (UL)	12: Jonas Koenemann (Ampyx)	Lunch	
1:00 PM			Oral Presentation Skills	Oral Presentation Skills	6: Ashwin Candade (Enerkite)	
	7: Elena Malz (CHAL)	14: Eva Ahbe (ETHZ)				
2:00 PM	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
3:00 PM			Oral Presentation Skills	Oral Presentation Skills	Board Member Meeting	Project Management Skills
4:00 PM						
5:00 PM						
6:00 PM	Tour of Vauban, Freiburg*					
7:00 PM						
8:00 PM						Group Dinner at Kartoffelhaus**

\* Paula-Modersohn-Platz Tramstation, Freiburg

\*\* Kartoffelhaus: Basler Straße 10, Freiburg

\*\*\* Meet at Freiburg Bahnhof at 9am on platform 7, train leaves at 9:10