NTNU
Norwegian University of
Science and Technology

Winter School Kvitfjell 2025
Planning Under Uncertainty in Energy Markets
NORDAB - The Norwegian Doctoral Academy in Business

NHH
NOR DAB

Sunday 6 April		
15:00 - 19:30	Registration	At the front desk
20:00	*Dinner*	
Monday 7 April		
07:00 - 08:00	*Breakfast*	Please remember to pack your lunch at the breakfast buffet, and bring it with you on your skiing trip
08:15 - 09:00	Mette Bjørndal and Asgeir Tomasgard	*Welcome and introduction*
09:00 - 09:45	Stein W. Wallace	*Stochastics and flexibility*
09:45 - 10:00	*Break*	
10:00 - 10:45	Stein W. Wallace	*Stochastics and flexibility*
10:45 - 11:30	Stein-Erik Fleten	*Bidding into short-term electricity markets*
11:30 - 15:30	*Recreational time*	
15:30 - 17:00	Andy Philpott	*2 Tutorials: SDDP.jl and JuDGE.jl*
17:00 - 17:30	*Break*	
17:30 - 19:00	Andy Philpott	*2 Tutorials: SDDP.jl and JuDGE.jl*
20:00	*Dinner*	
Tuesday 8 April		
07:00 - 08:00	*Breakfast*	Please remember to pack your lunch at the breakfast buffet, and bring it with you on your skiing trip
08:15 - 09:45	Hongyu Zhang	*Stochastic programming in energy system planning: modelling and algorithms*
09:45 - 10:00	*Break*	
10:00 - 11:30	Francesca Maggioni	*An introduction to bounds/approximations for two stage, multistage and multi-horizon stochastic optimization/DRO problems with application to power generation and transmission expansion planning*
11:30 - 15:30	*Recreational time*	
15:30 - 17:00	Sonja Wogrin	*Leveraging efficient data aggregation for solving energy system models*
17:00 - 17:30	*Break*	
17:30 - 19:00	Selva Nadarajah	*Approximating weakly coupled dynamic systems for energy investment and operations*
20:00	*Dinner*	
Wednesday 9 April		
07:00 - 08:00	*Breakfast*	Please remember to pack your lunch at the breakfast buffet, and bring it with you on your skiing trip
08:15 - 09:00	Selva Nadarajah	*Approximating weakly coupled dynamic systems for energy investment and operations*
09:00 - 09:45	Tatiana Gonzaléz Grandón	*Risk vs. Reward: Optimization Under Uncertainty with Chance Constraints in Finance & Energy*
09:45 - 10:00	*Break*	
10:00 - 11:30	Ramteen Sioshansi	*Assessing the Capacity Value of Energy Storage that Provides Frequency Regulation*
11:30 - 15:30	*Recreational time*	
15:30 - 17:00	Anthony Papavasiliou	*Capacity Expansion with Reliability Criteria*
17:00 - 17:30	*Break*	
17:30 - 19:00	Jalal Khazempour	*Data-Driven Optimization with Contextual Information for Selling Wind Power and Hydrogen*
20:00	*Dinner*	
Thursday 10 April		
07:00 - 08:00	*Breakfast*	Please remember to pack your lunch at the breakfast buffet, and bring it with you on your skiing trip
08:15 - 09:45	Steven Gabriel	*Solving Equilibrium Problems in Energy and Other Infrastructure using a Difference of Convex Functions Method*
09:45 - 10:00	*Break*	
10:00 - 11:30	Afzal S. Siddiqui	*Environmental Policy under Risk Aversion: Prices vs. Quantities*
11:30 - 15:30	*Recreational time*	
15:30 - 17:00	Golbon Zakeri	*Risk and risk market completion for coherent risk measures*
17:00 - 17:30	*Break*	
17:30 - 19:00	Golbon Zakeri	*Risk and risk market completion for coherent risk measures*
19:30	*Dinner*	
Friday 11 April		
07:00 - 08:00	*Breakfast*	
08:15 - 09:45	Vincent Leclere	*Should I use Dynamic Programming or Stochastic Programming?*
09:45 - 10:00	*Break*	
10:00 - 11:30	Hans Auer	*Decarbonization and Flexibility Provision of District Heating and Cooling Systems under Uncertainty*
12:00	*Lunch*	

The Research Council of Norway

Norwegian Centre for Environment-friendly Energy Research

NTRANS
Norwegian Centre for Energy Transition Strategies

EWG STOCHASTIC OPTIMIZATION

EURO Working Group on Stochastic Optimization (EWGSO)