

Nordic Winter Sport Conference

📍 Trondheim, Norway
April 22 - 24, 2026

Program

Day 1 - April 22

11.00 - 11.30

Registration

11.30 - 12.30

Lunch

12.30 - 12.45

Opening Remarks

12.45 - 13.40

Invited Lecture

AI in sport science - *Prof. Billy Sperlich*

13.45 - 14.45

Oral Presentations 1 (15 minutes)

Development and Numerical Evaluation of an Open-Air Flight Simulation Facility for Ski Jumping Aerodynamics - *Dirk Schoening*

Towards an AI-accelerated sports aerodynamics pipeline - *Knut Erik Teigen Giljarhus*

The Aerodynamic Influence of Arms while Cornering During a 5000 m Speed Skating Race - *Ola Elfmark*

Elastic energy innovations in speed skating suits - *Håvard Myklebust*

14.45 - 15.00

Coffee Break

15.00 - 15.55

Invited Lecture

Reflections on tech use at the Winter Olympics 2026 - *Dr. Felix Breitschadel*

16.00 - 16.45

Oral Presentations 2 (15 minutes)

Dynamics of heart rate time series during progressive high intensity roller ski skating in undulating field conditions - *Hannes Kock*

The relationship between the pole force ratio and gross efficiency in cross-country skiing: a pilot study - *Marton Horvath*

From lab to field: The metabolic demand of a cross-country skier - *Heleen Docter*

16.45 - 17.00

Coffee Break with snack

17.00 - 18.00

Invited Lecture

FramSki - Making skis faster on the macro-, micro- and nanoscale
Prof. Alex Klein-Paste & Dr. Audun Formo Buene



Organising
Committee:

 **NTNU**
Norwegian University of
Science and Technology


Mittuniversitetet
MID SWEDEN UNIVERSITY

 **NORD**
University

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Day 2 - April 23

8.15 - 8.30

Registration

8.30 - 9.25

Invited Lecture

Challenges when measuring aerobic metabolism in sub-zero environments - *Dr. Jos J. de Koning*

9.30 - 10.25

Invited Lecture

Exercise-induced bronchoconstriction when exercising in the cold - *Dr. Helen Hanstock*

10.30 - 11.00

Smoothie / Coffee Break

11.00 - 12.00

Oral Presentations 3 (15 minutes)

Accuracy of commercial global navigation satellite system receivers during alpine ski training: a multi-device comparison - *Petter Jølstad*

How Can Vision-Based Artificial Intelligence Be Used for Technique Assessment in Cross-Country Skiing? - *Jan Kocbach*

PET imaging technology as a tool to elucidate cardiac function in endurance athletes. - *Ilkka Heinonen*

Mapping open innovation strategies among sports start-ups in Europe - *Daniele Canini*

12.00 - 13.00

Lunch

13.00 - 13.55

Athlete Interview with Astrid Øyre Slind

From "Grey stone to gold" - lessons learned on my journey to the top - *Astrid Øyre Slind & Guro Strøm Solli*

14.00 - 14.45

Poster Presentations and Coffee Break



Walk or public transit to NTNU Helgasetr

15.30 - 16.30

Practical Workshop (Helgasetr)

From foundational training to performance with *Nina Stiles and Vemund Øvstehage*

19.00 - 22.00

Conference Dinner

Rockheim Panorama



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Day 3 - April 24

8.15 - 8.30

Registration

8.30 - 9.25

Invited Lecture

Methodological and technological considerations for menstrual health tracking - *Prof. Kerry McGawley & Dr. Madison Y. Taylor*

9.30 - 10.30

Oral Presentations 4 (15 minutes)

Curvature creates speed: A new perspective on speed skating technique - *Jeroen van der Eb*

Within and between season development in performance-determining variables in cross country skiers - *Knut Skovereng*

Influence of fatigue on transitions in ski-mountaineering - *Simone Fornoni*

A quantitative study on athletes' willingness to communicate health-related-issues among high-performing Norwegian cross-country skiers - *Stian Selbekk*

10.30 - 10.45

Coffee Break with snack

10.45 - 11.40

Invited Lecture

The ethics of sports technology - *Prof. Anne Tjønndal*

11.45 - 12.00

Closing Remarks and Awards



*Thank you for joining
us in Trondheim!*

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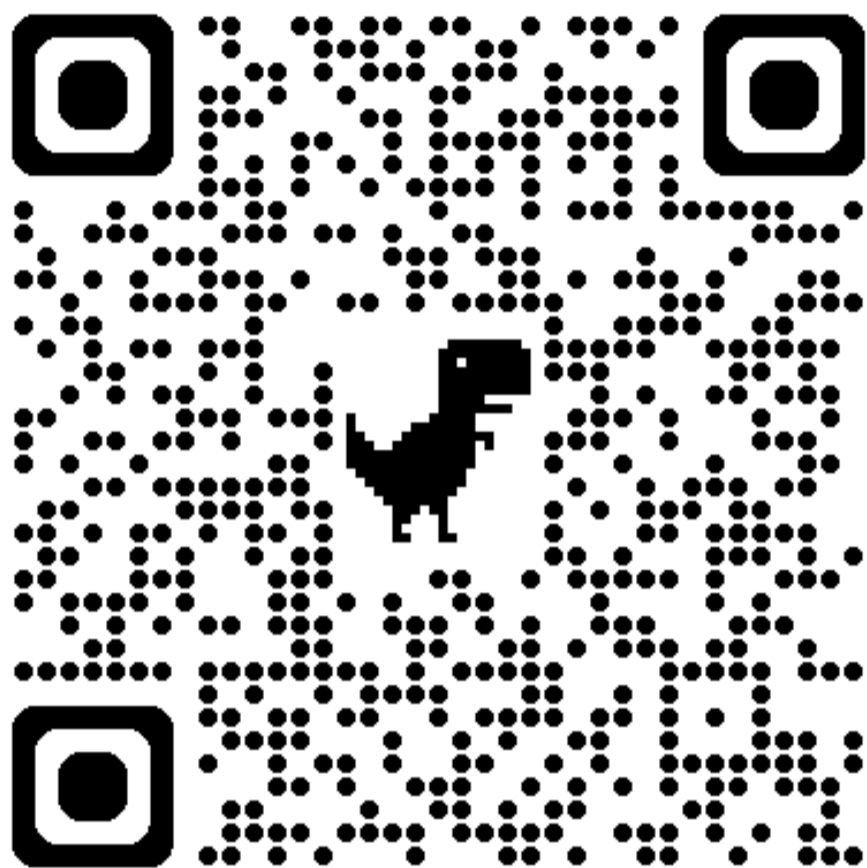


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QR CODES

Conference Program



Map to Helgasetr

NTNU og Sit - Helgasetr
Elgeseter Gate 28, 7030 Trondheim



Conference Dinner

Rockheim Panorama (Top Floor)
Brattørkaia 14, 7010 Trondheim



Organising
Committee:

