

Practice meets science

International advanced training course on “Snow and Avalanches”

## Program

11 – 15 February 2019 in Davos

Location: Sunstar Alpine Hotel, Parkstrasse 1, 7270 Davos Platz

### Sunday, 10 February 2019

18:00-19:00	Registration at the hotel lobby	<i>S. Harvey</i> <i>M. Hofmänner</i>
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### Monday, 11 February 2019

Room Sertig

07:45-08:15	Registration at the hotel lobby	<i>S. Harvey</i> <i>M. Hofmänner</i>
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Chair: Christine Pielmeier

08:15-08:30	Introduction	<i>S. Harvey</i>
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08:30-08:45	Avalanches in Switzerland and history of SLF	<i>J. Schweizer</i>
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08:45-09:30	Snow physics	<i>H. Löwe</i>
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09:40-10:25	Avalanche formation	<i>A. van Herwijnen</i>
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10:25-10:55 Coffee break

11:00-12:30	Exercise: Avalanche formation and snowpack interpretation	<i>S. Harvey</i> <i>A. van Herwijnen</i>
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12:30-13:45 Lunch break

Chair: Stephan Harvey

14:00-14:30	Best practice in avalanche forecasting	<i>K. Winkler</i>
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14:40-15:10	Opportunities and limitations of avalanche forecasts	<i>C. Pielmeier</i>
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15:15-15:30	Introduction to exercise and data interpretation	<i>K. Winkler</i>
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15:30-16:00 Coffee break

16:00-17:40	Exercise: Assessment of avalanche danger	<i>K. Winkler</i> <i>Instructors</i>
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17:40-18:00	Summary of the day; outlook field day	<i>S. Harvey</i>
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18:00-18:30 Ice breaker

**Tuesday, 12 February 2019**

Room Sertig and field

Chair: Ben Reuter

08:00-08:45	Snow profile observation and stability tests	<i>B. Reuter</i>
08:45-08:50	Introduction field day / current situation	<i>S. Harvey</i>
09:00-15:00	Field day: Snow profile observation and stability tests	<i>Instructors</i>

Lunch in the field

15:00-15:30 Coffee break in the hotel

15:30-16:30	Snow profile and stability evaluation	<i>Instructors</i>
16:30-17:10	Presentation of results and evaluation by each group	<i>S. Harvey</i>
17:10-17:40	Snow profile interpretation	<i>J. Schweizer</i>

20:00-21:00 Science event at SLF *H. Löwe / Y. Bühler*

VBD-Bus Linie 1 Postplatz bis Bhf Dorf: ab 19:46 – 19:56

**Wednesday, 13 February 2019** Room Sertig

Chair: Lukas Stoffel

08:00-08:20	Avalanche history Davos	<i>S. Margreth</i>
08:30-09:10	Avalanche dynamics	<i>P. Bartelt</i>
09:20-09:50	Avalanche hazard mapping	<i>S. Margreth</i>
09:50-10:20	Coffee break	
10:20-12:15	Human factors in decision making	<i>HP. Hartmann</i> <i>S. Harvey</i>
12:15-13:30	Lunch break	
13:30-14:10	Wet- and glide-snow avalanches	<i>J. Schweizer</i>

Separate programs for module 1 and 2

**Module 1** Room Sertig

Chair Henning Löwe

14:20-14:55	Snow mechanics	<i>H. Löwe</i>
15:00-15:35	Snowpack stability: Layering and variability	<i>A. van Herwijnen</i>

15:40-16:10 Coffee break

16:10-16:45	Measuring snow properties (PST, SMP)	<i>B. Reuter</i>
16:50-18:00	Assessment of avalanche hazard in the backcountry	<i>S. Harvey</i>
18:00-18:15	Summary of the day	<i>S. Harvey</i>

**Module 2** Room Grialetsch

Chair: Lukas Stoffel

14:20-15:00	Temporary protection measures	<i>L. Stoffel</i>
15:05-15:35	Artificial avalanche release	<i>L. Stoffel</i>

16:10-16:30	Avalanche detection	<i>A. van Herwijnen</i>
16:30-18:00	Exercise: Road closure, yes or no? Case study	<i>L. Stoffel</i>
18:00-18:15	Summary of the day	<i>L. Stoffel</i>

**Thursday, 14 February 2019**

Room Sertig/Grialetsch and field

Separate programs for module 1 and 2

<b>Module 1</b> Room Sertig and field		<b>Module 2</b> Room Grialetsch and field	
Chair: Alec van Herwijnen		Chair: Stefan Margreth	
08:00- 08:15	Introduction field day <i>S. Harvey</i>	08:00- 09:20	Permanent protection measures <i>S. Margreth</i>
08:15- 14:45	Field day: New methods for field measurements <i>Instructors</i>	09:30- 10:20	Experience of a local avalanche service <i>J.A. Bisaz</i>
14:45- 15:15	Coffee break in the Hotel		Visit Jakobshorn patrollers, Davos Frauenkirch and Klosters <i>L. Stoffel</i> <i>S. Margreth</i>
15:15- 15:55	Snow profile and stability evaluation, discussion and reflection of the field day <i>Instructors</i>		
16:00- 16:40	Principles of snow cover models <i>S. Bellaire</i>		
16:50- 17:20	Operational avalanche forecasting <i>C. Pielmeier</i>		
17:20- 17:30	Summary of the day		
17:50	Bus leaves at Hotel Sunstar		
18:00-23:00	Social event: Visit to local brewery and dinner in Monstein		

**Friday, 15 February 2019**

Room Sertig and Grialetsch

Separate programs for module 1 and 2

<b>Module 1</b> Room Sertig		<b>Module 2</b> Room Grialetsch	
Chair: Stephan Harvey		Chair: Yves Bühler	
08:00-08:50	Snow stability evaluation and interpretation of measurements from previous field day <i>A. van Herwijnen</i>	08:00-08:25	RAMMS: Rapid mass movement simulations <i>Y. Bühler</i>
09:00-09:45	Summary of the key facts: "The big picture" <i>S. Harvey</i>	08:25-09:00	Practical use of avalanche modeling <i>L. Stoffel</i>
		09:10-09:45	Recent model developments – Application in practice <i>Y. Bühler</i> <i>L. Stoffel</i>
09:45-10:15 Coffee break			
10:15-11:00	Synthesis of course: Final discussion <i>C. Pielmeier</i> <i>S. Harvey</i>	10:15-11:00	Synthesis of course: Final discussion <i>Y. Bühler</i> <i>L. Stoffel</i>
11:00-11:30	Answers to open questions		<i>J. Schweizer</i>
11:30-12:00	Presentation of synthesis in each group or module		<i>C. Pielmeier</i> <i>Y. Bühler</i>
12:00-12:15	Closing remarks		<i>S. Harvey</i>
12:15-13:30 Lunch buffet			
13:30-16:00	RAMMS workshop (optional)		<i>Y. Bühler</i> <i>L. Stoffel</i> <i>M. Christen</i>