



Dagstuhl-Seminar 22082

Deep Learning and Knowledge Integration for Music Audio Analysis

20. - 25. Februar 2022

Sun, Feb. 20, 2022

15:00-19:00 Reception open From 19:00 Self-service check-in

Mon, Feb. 21, 2022

07:30-08:45 Breakfast

09:00-12:00 Programme

- Welcome/overview by Meinard Müller
- Self-introductions by participants
- Stimulus talk by Rachel Bittner: Toward a new generation of source separation metrics

12:15 Lunch

14:15-17:45 Programme

- Stimulus talk by Umut Simsekli: Let's be brave: Some taboo topics that we need to talk
- Stimulus talk by Juhan Nam: What is the future of audio representation for music?
- Stimulus talk by Christof Weiß: Is deeper better? Towards reliable evaluation of music transcription
- Discussing and planning program for next day

18:00 Dinner

19:30 Evening activities

Tue, Feb. 22, 2022

07:30-08:45 Breakfast

09:00-12:00 Programme

- Stimulus talk by Geoffroy Peters: Do we need specific audio front-ends (for DL) or is 1D-Conv enough?
- Stimulus talk by Dasaem Jeong: Expressive music performance
- Group discussions in three subgroups

12:15 Lunch

14:15-17:45 Programme

Presentation of subgroup discussions

Group 1: Integrating musical knowledge I

Group 2: Integrating musical knowledge II

Group 3: Teaching MIR

- Stimulus talk by Bob Sturm and Cynthia Liem: Responsible engineering
- Discussing and planning program for next day

18:00 Dinner

19:30 Evening activities

Wed, Feb. 23, 2022

07:30-08:45 Breakfast

09:00-12:00 Programme

- Stimulus talk by Yu Wang: Towards adaptive and interactive machine learning with minimal supervision
- Stimulus talk by Magdalena Fuentes: Generalization vs. customization
- Stimulus talk by Simon Durand and Daniel Stoller: Which task to rule them all?
- Discussing and planning program for next day

12:15 Lunch

13:15-18:00 Outdoor activities

18:00 Dinner

19:30 Evening activities

Thu, Feb. 24, 2022

07:30-08:45 Breakfast

09:00-12:00 Programme

- Stimulus talk by Gül Varol: A computer vision perspective
- Stimulus talk by Michael Krause: Soft alignment techniques for music information retrieval
- Stimulus talk by Sebastian Ewert: What is our problem?

12:15 Lunch

14:15-17:45 Programme

- Stimulus talk by Yigitcan Özer: Source separation of piano concertos with test-time adaptation
- Stimulus talk by Gaël Richard: Informed source separation in limited data settings
- Stimulus talk by Stefan Balke: Tame your KPIs with data science
- Stimulus talk by Meinard Müller: Combining NMF-based decomposition and neural network techniques

18:00 Dinner

19:30–22:00 Evening concert with classical music, Irish folk music, and jazz

Fri, Feb. 25, 2022

07:30-08:45 Breakfast

09:15–12:00 Programme

- Tutorial by Umut Simsekli: Deep learning theory
- Self-outroductions by participants
- Wrap-up session

12:15 Lunch

13:00 Departure