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## Tidsskrift artikler

- Kantan, P. R., Dahl, S., Serafin, S., & Spaich, E. G. (2024). Sonifying gait kinematics: generating water wading sounds through a digital Foley approach. *Personal and Ubiquitous Computing*. Advance online publication. <https://doi.org/10.1007/s00779-024-01829-1>
- Dahl, S., Stella, A., & Bjørner, T. (2023). Tell me what you see: An exploratory investigation of visual mental imagery evoked by music. *Musicae Scientiae*, 27(3), 717–740. <https://doi.org/10.1177/10298649221124862>
- Kantan, P. R., Dahl, S., Rovsing Møller Jørgensen, H., Khadye, C., & Spaich, E. G. (2023). Designing Ecological Auditory Feedback on Lower Limb Kinematics for Hemiparetic Gait Training. *Sensors*, 23(8), Artikel 3964. <https://doi.org/10.3390/s23083964>
- Kantan, P. R., Spaich, E. G., & Dahl, S. (2022). An Embodied Sonification Model for Sit-to-Stand Transfers. *Frontiers in Psychology*, 13, Artikel 806861. <https://doi.org/10.3389/fpsyg.2022.806861>
- Kantan, P. R., Spaich, E. G., & Dahl, S. (2022). A Technical Framework for Musical Biofeedback in Stroke Rehabilitation. *IEEE Transactions on Human-Machine Systems*, 52(2), 220-231. <https://doi.org/10.1109/THMS.2021.3137013>
- González Sánchez, V. E., Dahl, S., Hatfield, J., & Godøy, R. I. (2019). Characterizing movement fluency in musical performance: Toward a generic measure for technology enhanced learning. *Frontiers in Psychology*, 10, Artikel 84. <https://doi.org/10.3389/fpsyg.2019.00084>
- Erkut, C., & Dahl, S. (2019). Incorporating Virtual Reality with Experiential Somaesthetics in an Embodied Interaction Course. *Journal of Somaesthetics*, 4(2), 25-39. <https://doi.org/10.5278/ojs.jos.v4i2.2399>
- Dahl, S., Huron, D., Brod, G., & Altenmüller, E. (2014). Preferred Dance Tempo: Does Sex or Body Morphology influence how we groove? *Journal of New Music Research*, 43(2), 214-223. <https://doi.org/10.1080/09298215.2014.884144>
- Petrini, K., Pollick, F. E., Dahl, S., McAleer, P., McKay, L., Rocchesso, D., Waadeland, C. H., Love, S., Avanzini, F., & Puce, A. (2011). Action expertise reduces brain activity for audiovisual matching actions: An fMRI study with expert drummers. *NeuroImage*, 56(3), 1480-1492. <https://doi.org/10.1016/j.neuroimage.2011.03.009>
- Huron, D., Dahl, S., & Johnson, R. (2009). Facial expression and vocal pitch height: Evidence of an intermodal association. *Empirical Musicology Review*, 4(3), 93-100. <http://emusicology.org/v4n3/target.html>
- Petrini, K., Dahl, S., Rocchesso, D., Waadeland, C. H., Avanzini, F., Puce, A., & Pollick, F. E. (2009). Multisensory integration of drumming actions: musical expertise affects perceived audiovisual asynchrony. *Experimental Brain Research*, 198(2-3), 339-352. <https://doi.org/10.1007/s00221-009-1817-2>
- Dahl, S., & Friberg, A. (2007). Visual perception of expressiveness in musicians' body movements. *Music Perception*, 24(4), 433-454.

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Dahl, S. (2004). Playing the accent - comparing striking velocity and timing in an ostinato rhythm performed by four drummers. *Acustica United with Acta Acustica*, 90(4), 762-776.

Dahl, S., & Granqvist, S. (2003). Estimating Internal Drift and Just Noticeable Difference in perception of continuous tempo drift. *Annals of the New York Academy of Sciences*, 999, 161-165.

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## Bokkapitler

### **The Effect of Auditory Pulse Clarity on Sensorimotor Synchronization**

Kantan, P. R., Stefan Alecu, R. & Dahl, S., 10 mar. 2021, *Perception, Representations, Image, Sound, Music - 14th International Symposium, CMMR 2019, Revised Selected Papers*. Kronland-Martinet, R., Ystad, S. & Aramaki, M. (red.). Springer, Bind 12631. s. 379-395 17 s. (Lecture Notes in Computer Science).

### **Movements, timing and precision of drummers**

Dahl, S., 2018, *Handbook of Human Motion*. Müller, B., Wolf, S., Brueggemann, G.-P., Deng, Z., McIntosh, A., Miller, F. & Selbie, W. S. (red.). Springer

### **The challenge of a lifetime**

Dahl, S., 2018, *Celebrity for the Curious : Why Study Celebrity, Music, and Film Studies? : (A Guide to University Major for Students, Their Career Advisors and Teachers)*. Vaidya, K. (red.). The Curious Academic Publishing

### **Gestures in performance**

Dahl, S., Bevilacqua, F., Bresin, R., Clayton, M., Leante, L., Poggi, I. & Rasamimanana, N., 2009, *Musical Gestures: Sound, Movement, and Meaning*. Godøy, R. I. & Leman, M. (red.). Routledge

Movements and analysis of drumming.

Dahl, S., 2006, *Music, Motor Control and the Brain..* Altenmüller, E., Wiesendanger, M. & Kesselring, J. (red.). New York: Oxford University Press, s. 125 -138

## Konferensbidrag

### **Developing Enjoyable Auditory Feedback Paradigms to Alleviate Toe Walking in Children with Cerebral Palsy**

Kantan, P. R., Dahl, S. & Spaich, E. G., 18 sep. 2024, *AM '24: Proceedings of the 19th International Audio Mostly Conference: Explorations in Sonic Cultures*. Ludovico, L. A. & Mauro, D. A. (red.). Association for Computing Machinery (ACM), s. 61-67 7 s.

### **Making Movement Sonification Usable in Clinical Gait Rehabilitation: A User-Centered Study**

Kantan, P. R., Dahl, S., Jørgensen, H. R. & Spaich, E. G., 18 sep. 2024, *AM '24: Proceedings of the 19th International Audio Mostly Conference: Explorations in Sonic Cultures*. Ludovico, L. A. & Mauro, D. A. (red.). Association for Computing Machinery (ACM), s. 43-60 18 s.

### **Developing an Integrated VR + Musical Feedback System for Stationary Biking in Endurance Training**

Kantan, P. R., Rojo, A., Olmo-Fajardo, T., Matas, L. M., Spaich, E. G., Dahl, S. & Moreno, J. C., 27 jun. 2024, *Proceedings of the 9th International Conference on Movement and Computing: MOCO 2024 Beyond Control*. New York, NY, USA: Association for Computing Machinery (ACM), s. 1-6 6 s. 25

### **Musical Biofeedback Paradigms to Promote High-Intensity Gait Training**

Kantan, P. R., Dahl, S., Røvsing Møller Jørgensen, H. & Spaich, E. G., 16 jun. 2024.

### **Adapting Audio Mixing Principles and Tools to Parameter Mapping Sonification Design**

Kantan, P. R., Dahl, S. & Spaich, E. G., jun. 2024, *The 29th International Conference for Auditory Display (ICAD 2024)*. 8 s.

### **Enjoyable Sound Feedback to Treat Toe Walking in Children with Cerebral Palsy**

Spaich, E. G., Dahl, S. & Kantan, P. R., 2024.

### **HearWalk: Co-designing and Building a Sound Feedback System for Hemiparetic Gait Training**

Kantan, P. R., Dahl, S., Røvsing Møller Jørgensen, H., Lanther, M. B. & Spaich, E. G., 2 nov. 2023.

### **Applying Concurrent Auditory Feedback on Swing Phase Kinematics in Hemiparetic Gait Training**

Kantan, P. R., Dahl, S., Røvsing Møller Jørgensen, H., Khadye, C. & Spaich, E. G., 24 sep. 2023.

### **User-Centered Design of Auditory Feedback for Hemiparetic Gait Rehabilitation**

Kantan, P. R., Dahl, S., Røvsing Møller Jørgensen, H., Khadye, C. & Spaich, E. G., 24 sep. 2023.

### **Sonifying Gait Kinematics Using the Sound of Wading: A Study on Ecological Movement Representations**

Kantan, P. R., Dahl, S., Serafin, S. & Spaich, E. G., jun. 2023, *The 28th International Conference on Auditory Display (ICAD 2023)*. 8 s. 5049

### **Sound-Guided 2-D Navigation: Effects of Information Concurrency and Coordinate System**

Kantan, P. R., Dahl, S. & Spaich, E. G., 8 okt. 2022, *Participative Computing for Sustainable Futures - Proceedings of the 12th Nordic Conference on Human-Computer Interaction, NordiCHI 2022*. Association for Computing Machinery (ACM), 11 s. 40

### **Designing Sonified Feedback on Knee Kinematics in Hemiparetic Gait Based on Inertial Sensor Data**

Kantan, P. R., Dahl, S., Røvsing Møller Jørgensen, H., Khadye, C. & Spaich, E. G., sep. 2022, *Proceedings of the SoniHED Conference on Sonification of Health and Environmental Data, 2022*. Paulett, S., Monach, S. D. & Selfridge, R. (red.). Zenodo

### **Performers' Use of Space and Body in Movement Interaction with A Movement-based Digital Musical Instrument**

Cavdir, D. & Dahl, S., 22 jun. 2022, *Proceedings of 2022 8th International Conference on Movement and Computing, MOCO 2022*. Association for Computing Machinery (ACM), s. 1-12 1. (ACM International Conference Proceeding Series, Bind Par F180475).

### **Sonifying Walking: A Perceptual Comparison of Swing Phase Mapping Schemes**

Kantan, P. R., Dahl, S., Spaich, E. G. & Bresin, R., 2022, *Proceedings of ISON 2022, 7th Interactive Sonification Workshop, BSCC, University of Bremen, Germany, September 22-23, 2022*. 8 s.

### **Beat precision and perceived danceability in drum grooves**

Ganis, F., Dahl, S., Schmidt Câmara, G. & Danielsen, A., 24 jun. 2021.

### **A Metaphor-Based Technical Framework for Musical Sonification in Movement Rehabilitation**

Kantan, P. R., Spaich, E. G. & Dahl, S., jun. 2021, *The 26th International Conference on Auditory Display*. 8 s.

### **Auditory biofeedback through real-time generated music for balance and gait training of stroke patients**

Kantan, P. R., Spaich, E. G., Røvsing Møller Jørgensen, H. & Dahl, S., jun. 2021.

### **Conveying Sit-to-Stand Kinematics Through Musical Sonification for Stroke Rehabilitation**

Kantan, P. R., Spaich, E. G. & Dahl, S., 2021.

### **Characterizing Subtle Timbre Effects of Drum Strokes Played with Different Technique**

Bigoni, F., Grossbach, M. & Dahl, S., sep. 2020, *Proceedings of the 2nd International Conference on Timbre (Timbre 2020), online conference.*. Thessaloniki, Greece: Aristotle University of Thessaloniki, 4 s.

### **Rhythm Rangers: an evaluation of beat synchronisation skills and musical confidence through multiplayer gamification influence**

Kjærbo, R. E. R., Parpal, R. R., Pérez, M. G., Correia, F. M. S. D. A. R., Guruvayurappan, V., Overholt, D. & Dahl, S., 2020, *Proceedings of the 17th Sound and Music Computing Conference*. Spagnol, S. & Valle, A. (red.). Torino: Axegas/SMC Network, s. 220-227 8 s. (Proceedings of the Sound and Music Computing Conference).

### **Evaluating movement qualities with visual feedback for real-time motion capture**

Hussain, A., Mødekjær, C., Austad, N. W., Dahl, S. & Erkut, C., 10 okt. 2019, *MOCO 2019 - Proceedings of the 6th International Conference on Movement and Computing*. Association for Computing Machinery (ACM), a1

### **ADEPT: Exploring the Design, Pedagogy, and Analysis of a Mixed Reality Application for Piano Training**

Gerry, L., Dahl, S. & Serafin, S., 2019, *Proceedings of the 16th Sound & Music Computing Conference SMC 2019*. Sound and Music Computing Network, Bind 1. s. 241-249 9 s. (Proceedings of the Sound and Music Computing Conference).

### **An Interactive Music Synthesizer for Gait Training in Neurorehabilitation**

Kantan, P. R. & Dahl, S., 2019, *Proceedings of the 16th Sound & Music Computing Conference SMC 2019*. Sound and Music Computing Network, s. 159-166 (Proceedings of the Sound and Music Computing Conference).

### **Communicating Gait Performance Through Musical Energy: Towards an Intuitive Biofeedback System for Neurorehabilitation**

Kantan, P. R. & Dahl, S., 2019, *Combined proceedings of the Nordic Sound and Music Computing Conference 2019 and the Interactive Sonification Workshop 2019*. Stockholm, Sweden: KTH Royal Institute of Technology, s. 107-114

### **Incorporating virtual reality in an embodied interaction course**

Erkut, C. & Dahl, S., 28 jun. 2018, *Proceedings of the 5th International Conference on Movement and Computing, MOCO 2018*. Association for Computing Machinery (ACM), 6 s. a45

### **Rhythmic recurrency in dance to music with ambiguous meter**

Dahl, S. & Sioros, G., 28 jun. 2018, *Proceedings of the 5th International Conference on Movement and Computing, MOCO 2018*. Association for Computing Machinery (ACM), 6 s. 38

### **An Expressive Multidimensional Physical Modelling Percussion Instrument**

Tissieres, J. Y., Vaseileiou, A., Zabetian, S., Delgado, P., Dahl, S. & Serafin, S., 2018, *Proceedings of the 15th Sound and Music Computing Conference (SMC2018)*. Georgaki, A. & Andreopoulou, A. (red.). Zenodo, s. 339-346 (Proceedings of the Sound and Music Computing Conference).

### **NordicSMC: A Nordic University Hub on Sound and Music Computing**

Serafin, S., Dahl, S., Bresin, R., Jensenius, A. R., Unnpörsson, R. & Välimäki, V., 2018, *Proceedings of the 15th Sound and Music Computing Conference (SMC2018)*. Sound and Music Computing Network, s. 130-134 (Proceedings of the Sound and Music Computing Conference).

### **Timbre Discrimination for Brief Instrument Sounds**

Bigoni, F. & Dahl, S., 2018, *Proceedings of the 19th International Society for Music Information Retrieval Conference*. dblp Computer Science Bibliography, s. 128-134

### **Embodied Interaction through Movement in a Course Work**

Erkut, C. & Dahl, S., 28 jun. 2017, *MOCO 2017 - Proceedings of the 4th International Conference on Movement Computing*. Association for Computing Machinery (ACM), 23

### **Does Singing a Low-Pitch Tone Make You Look Angrier?**

Ahrendt, P., Bach, C. C. & Dahl, S., 2017, *Proceedings of the 14th Sound and Music Computing Conference 2017*. Aalto University, s. 181-187 (Proceedings of the Sound and Music Computing Conference).

### **Exploring Sound-Motion Textures in drum set performance**

Godøy, R. I., song, M. & Dahl, S., 2017, *Proceedings of the 14th Sound and Music Computing Conference*. Aalto University, 8 s. (Proceedings of the Sound and Music Computing Conference).

### **Extraction, Mapping, and Evaluation of Expressive Acoustic Features for Adaptive Digital Audio Effects**

Holfelt, J., Csapo, G., Andersson, N. S., Zabetian, S., Castanieto, M. A., Overholt, D., Dahl, S. & Erkut, C., 2017, *Proceedings of the 14th Sound and Music Computing Conference 2017*. Lokki, T., Patynen, J. & Valimaki, V. (red.). Aalto University, s. 328-335 8 s. (Proceedings of the Sound and Music Computing Conference).

### **Exploring felt qualities of embodied interaction with movement and sound**

Erkut, C., Rajala-Erkut, A. & Dahl, S., 2015, *Arts and Technology: Fourth International Conference, ArtsIT 2014, Istanbul, Turkey, November 10-12, 2014, Revised Selected Papers*. Brooks, A. L., Ayiter, E. & Yazicigil, O. (red.). Springer, s. 77-85 9 s. (Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST, Bind 145).

### **Sketches in Embodied Interaction: Balancing Movement and Technological Perspectives**

Erkut, C., Dahl, S. & Triantafyllidis, G., 1 jan. 2014, *HCI International 2014: International Conference, HCI International 2014, Heraklion, Crete, Greece, June 22-27, 2014. Proceedings, Part I*. Springer, s. 30-35 6 s. (Communications in Computer and Information Science, Bind 434 PART I).

### **Sound and music computing at Aalborg University in Copenhagen**

Serafin, S., Dahl, S., Götzen, A. D., Erkut, C., Overholt, D., Purwins, H. & Sturm, B., 1 jan. 2014, *Proceedings - 40th International Computer Music Conference, ICMC 2014 and 11th Sound and Music Computing Conference, SMC 2014 - Music Technology Meets Philosophy: From Digital Echos to Virtual Ethos*. National and Kapodistrian University of Athens, s. 1818-1821 4 s.

### **Good playing practice when drumming: Influence of tempo on timing and preparatory movements for healthy and dystonic players**

Dahl, S., Grossbach, M. & Altenmüller, E., aug. 2011, *Proceedings of the International Symposium on Performance Science 2011*. Williamon, A., Edwards, D. & Bartel, L. (red.). Utrecht, The Netherlands.: European Association of Conservatoires, s. 237-242

### **Effect of dynamic level in drumming: Measurement of striking velocity, force, and sound level**

Dahl, S., Grossbach, M. & Altenmüller, E., 2011, *Proceedings of Forum Acusticum*. Danish Acoustical Society, s. 621-624 4 s.

### **Timing and motor control in drumming: Comparing players with and without focal dystonia.**

Dahl, S., Grossbach, M. & Altenmüller, E., 2010.

### **Disturbed moving patterns when drumming - influence of extreme tempi on percussionists with and without focal dystonia**

Dahl, S. & Altenmüller, E., 2009.

### **Influences of movement and grip on perceptual and measured tone quality in drumming**

Dahl, S., Grossbach, M. & Altenmüller, E., 2008.

### **Motor control in drumming: Influence of movement pattern on contact force and sound characteristics"**

Dahl, S. & Altenmüller, E., 2008. 6 s.

### **Sound production in healthy and diseased drummers: an acoustic and movement analysis approach.**

Dahl, S. & Altenmüller, E., 2008.

High pitch - friendly face.  
Dahl, S., Huron, D. & Johnson, R., 2007.

The influence of Body Morphology on Preferred Dance Tempos.  
Dahl, S. & Huron, D., 2007, *International Computer Music Conference -ICMC07*. International Computer Music Association, Bind 2. s. 1-4

Production and perception of gestures in music performance.  
Dahl, S., 2006.

Motor behaviour in drumming with different striking tools: Effects of tempo on control of rebound.  
Dahl, S. & Huys, R., 2005.

## **Aktiviteter**

### **Movement and Timing Control in Music Performance**

Dahl, S. (Foredragsholder)  
4 jun. 2021

### **Movement qualities in different time frames**

Dahl, S. (Foredragsholder)  
5 maj 2021

### **16th Sound and music computing conference**

Dahl, S. (Deltager)  
28 maj 2019 → 31 maj 2019

### **NordicSMC Winter School**

Dahl, S. (Deltager)  
4 mar. 2019 → 8 mar. 2019

### **6th International Conference on Movement and Computing**

Dahl, S. (Arrangør) & Erkut, C. (Arrangør)  
2019 → ...

### **The Journal of Somaesthetics (Tidsskrift)**

Erkut, C. (Redaktør) & Dahl, S. (Redaktør)  
2019

### **RITMO International Motion Capture Workshop**

Dahl, S. (Deltager)  
12 nov. 2018 → 14 nov. 2018

### **5th International Conference on Movement and Computing, MOCO 2018**

Dahl, S. (Arrangør)  
28 jun. 2018 → 30 jun. 2018

### **Journal of Somaesthetics (Tidsskrift)**

Dahl, S. (Redaktør) & Erkut, C. (Redaktør)  
mar. 2018 → jan. 2019

**4th International conference on movement and computing**

Dahl, S. (Deltager)  
28 jun. 2017 → 30 jun. 2017

**4th International conference on movement and computing**

Dahl, S. (Deltager)  
28 jun. 2017 → 30 jun. 2017

**Workshop: Training, Sharing, and Enacting: Somaesthetics of Rhythmic Interaction**

Erkut, C. (Foredragsholder) & Dahl, S. (Foredragsholder)  
28 jun. 2017

**First International Workshop on Motor Learning for Music Performance**

Dahl, S. (Deltager), song, M. (Deltager) & Godøy, R. I. (Deltager)  
15 maj 2017

**New Interfaces for Musical Expression 2017**

Dahl, S. (Arrangør)  
2017 → ...

**Frontiers in Psychology (Tidsskrift)**

Madison, G. (Redaktør), Grahn, J. (Redaktør), Dahl, S. (Fagfællebedømmer) & Gouyon, F. (Redaktør)  
2014 → ...

**Research Topic Functions of musical rhythm (Tidsskrift)**

Dahl, S. (Redaktør)  
31 okt. 2013 → 30 jun. 2014

**International symposium on performance science**

Dahl, S. (Arrangør)  
28 aug. 2013 → 31 aug. 2013

**SMAC Stockholm Music Acoustics Conference 2013 SMC Sound and Music Computing Conference 2013**

Dahl, S. (Arrangør)  
30 jul. 2013 → 3 aug. 2013

**Expression and control in music performance: The role of musicians' movements**

Dahl, S. (Oplægsholder)  
4 jun. 2013

**9th Sound and Music Computing Conference (SMC 2012)**

Dahl, S. (Arrangør)  
11 jul. 2012 → 14 jul. 2012

**Sound and Music Computing, Understanding and Practicing in Sweden**

Dahl, S. (Arrangør)  
3 apr. 2012 → 4 apr. 2012

**13th International Rhythm Perception and Production Workshop**

Dahl, S. (Arrangør)  
13 jul. 2011 → 15 jul. 2011

**ASME 2011 World Conference on Innovative Virtual Reality (WINVR2011)**

Dahl, S. (Arrangør)  
27 jun. 2011 → 29 jun. 2011

**Journal of New Music Research (Tidsskrift)**

Dahl, S. (Anmelder)

1 jan. 2011 → ...

**Journal of New Music Research (Tidsskrift)**

Dahl, S. (Fagfællebedømmer)

2011 → ...

**Haptic Audio Interaction Design**

Dahl, S. (Arrangør)

16 sep. 2010 → 17 sep. 2010

**The striking movement.: How do percussionists control timing and dynamic level when drumming?**

Dahl, S. (Foredragsholder)

11 feb. 2010

**The striking movement.: How do percussionists control timing and dynamic level when drumming?**

Dahl, S. (Foredragsholder)

11 feb. 2010

**Movement and timing control in drummers.**

Dahl, S. (Foredragsholder)

20 nov. 2009