

Selbstbericht im Rahmen der Zwischenevaluation:

**Juniorprofessur für Komposition und Musiktheorie
in postdigitalen Bildungsräumen**

BEGLEITDOKUMENTATION

Anlage 9e: Interne Fördermittel für Forschungsprojekte

Jun.-Prof. Dr. Lawrence Wilde

Adolf-Reichwein-Straße 2
57068 Siegen

Selbstbericht

Begleitdokumentation – Anlage 9e: Interne Fördermittel für Forschungsprojekte

Interne Fördermittel für Forschungsprojekte (Gesamt: 23.179 €)

***Besser innovativ!* (19.852 €) und Qualitätsverbesserungsmittel für Lehre und Studium (QV) (3.327 €)**

Status: Bewilligt

2023 erhielt ich 19.852 € aus der Förderlinie *Besser innovativ!* der Universität Siegen zur Gründung von PULSE, einem technologievermittelten Musikensemble im Rahmen der Musiklehrkräftebildung. Der Kurs verbindet digitale Musikpraxis mit kritischer Reflexion über Technologie, fördert interdisziplinäre Zusammenarbeit und endet mit einer öffentlichen Multimedia-Performance.

Zur weiteren Umsetzung und Infrastrukturverbesserung beantragte ich ergänzend 1.971 € (2023/24) sowie 1.356 € (2024/25) aus QV-Mitteln. Diese dienen dem Erwerb digitaler Audio-Interfaces und der Förderung chancengerechter Teilhabe an professionellen Musiktechnologien. PULSE fungiert inzwischen als laufendes Forschungsprojekt zur Untersuchung postdigitaler Musikpädagogik und kollaborativer Kreativprozesse.

❖ *Die vollständigen Anträge beginnen auf Seite 3 dieses Dokuments.*

Klicken oder tippen Sie, um ein Datum einzugeben.

Eligible to apply:

All teachers at the University of Siegen (Besser innovativ!)

I) Applicant(s)

Contact 1

Faculty/Institute/Teaching Unit	Fakultät II / Institut Musik
Acad. title, if applicable	Jun.-Prof. Dr.
First and last name	Lawrence Wilde
Work address	Adolf-Reichwein-Str.2 57068 Siegen
E-mail	lawrence.wilde@uni-siegen.de
Telephone	+49 (0)162/724-5693

Contact 2

Faculty/Institute/Teaching Unit	Fakultät II / Institut Musik
Acad. title, if applicable	Wissenschaftlicher Mitarbeiter (Musikpädagogik)
First and last name	Benjamin Weyel
Work address	Adolf-Reichwein-Str.2 57068 Siegen
E-mail	benjamin.weyel@uni-siegen.de
Telephone	+49 (0)271/740-4537

II) project title (with acronym if applicable)

<p><i>PULSE:</i> Postdigital Laptop Ensemble University of Siegen</p>
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III) Target group(s) of the project/measure (Please choose as appropriate for the status groups).

Faculty	Fakultät II
If applicable, name of the selected study program or existing projects for testing:	
BA <input checked="" type="checkbox"/> and MA <input checked="" type="checkbox"/>	
If applicable, semester(s) or study section(s) or project section(s) in which the digital teaching and examination formats are to be integrated and tested.	<p>Semester(s): 2023 Winter semester with permanent integration into Institut Musik courses</p> <p>Study section(s): digital music composition & production, music theory and music education</p>

IV) Short description of the project (Max 1100 characters with spaces)

The Post-digital Laptop Ensemble at University of Siegen (PULSE) is an innovative technology-mediated music ensemble and a post-digital educational space for teacher training. PULSE meets the needs of future educators through application and critical reflection on the role of technology in music creation, teaching and learning. The project builds on the models of the Princeton Laptop Orchestra (PLOrk), the Stanford Laptop Orchestra (SLOrk), and other laptop ensembles by treating laptops, iPads and other portable digital devices, as effective musical and pedagogical instruments. As an applied teacher training course, PULSE investigates the application of laptop computers and digital technologies in childhood and higher education contexts. The potential contributions and outcomes of PULSE include innovative course design, technology-mediated performances, student projects, inter-university collaborations, documentation, and community engagement. The project's launch is planned for the Winter semester of 2023, with the goal of becoming a permanent course offering of the Institut Musik.

V) Concept of the project? (max. 1.5 pages/2600 characters with spaces) *[Which teaching and/or testing format(s) do you want to focus on? Is it a pilot project in the sense of the call for proposals? How is the development, testing and evaluation of digital or innovative teaching, learning and assessment formats included? Are students actively involved in all phases of the project?]*

Which teaching and/or testing format(s) do you want to focus on?

PULSE develops innovative teaching and learning formats in the areas of digital music composition, production and performance. It explores and integrates various teaching and testing formats that foster active student engagement and promote critical thinking about digital technology. PULSE incorporates digitally supported instruction through the use of Digital Audio Workstations (DAWs), music and multimedia coding (e.g., Pure data and Max/MSP/Jitter), and other digital and analogue technologies. These allow students to actively participate in hands-on activities, enabling them to develop practical skills in digital music creation, performance and teaching. In terms of testing formats, PULSE seeks to assess student learning outcomes through project-based assignments, performance-based assessments, and reflective evaluations. These formats provide opportunities for students to showcase their acquired skills, demonstrate understanding of digital music concepts, and reflect on their learning experiences.

How is the development, testing and evaluation of digital or innovative teaching, learning and assessment formats included?

The development, testing, and evaluation of digital teaching, learning, and assessment formats are central to the project. Teaching materials, learning resources, and assessment tools will be developed iteratively to ensure effectiveness and alignment with learning objectives. Evaluation will involve gathering feedback from students, assessing their progress and reflecting on the effectiveness of the implemented formats. This iterative

process will allow for continuous improvement and optimisation of the teaching and learning methodologies.

Are students actively involved in all phases of the project?

Active student involvement is a key part of the project. Students will have the opportunity to provide input, contribute ideas, and collaborate in the creation of new multimedia compositions, performances, and educational material. Students will also be actively involved in the testing and evaluation of the project, providing valuable feedback and insights to shape and enhance the project's outcomes. Their active involvement will ensure that the project meets their needs, fosters a sense of ownership and engagement, and prepares them for future roles as music educators.

VI) Implementation/integration of the project (max. 2 pages/3200 characters with spaces)

[Please describe the planned implementation and name the person(s) responsible for the implementation. How will the persons involved be involved in the development of the teaching and/or examination formats? If necessary: Can the digital infrastructure offered by the University of Siegen be integrated into the planned development? What types of material will be developed (e.g. videos, interactive tasks ...)? Does the teaching/learning offer adapt to the learning styles or learning needs of the students concerned?]

Please describe the planned implementation and name the person(s) responsible for the implementation.

Jun.-Prof. Dr. Lawrence Wilde, specializing in digital music production, composition and music theory, will be the primary person responsible for the implementation of the project. Dr. Wilde will work closely with Benjamin Weyel, Research Assistant in music education, to ensure the effective development and integration of teaching and assessment formats.

How will the persons involved be involved in the development of the teaching and/or examination formats?

Dr. Wilde and Mr. Weyel will collaborate in designing and refining the teaching materials and integrating digital tools and resources into the curriculum. Their expertise and perspectives will be invaluable in shaping the pedagogical approaches and ensuring alignment with the goal of establishing a permanent laptop ensemble at the University of Siegen.

Can the digital infrastructure offered by the University of Siegen be integrated into the planned development?

The planned development of teaching and assessment formats will leverage the existing digital infrastructure offered by the University of Siegen. Technological resources at the University and the Musik Institut, such as the DiMuPro digital music laboratory, software licenses, and audiovisual equipment, will be integrated into the project to support the creation of digital music compositions, multimedia presentations, and performances. The digital infrastructure will facilitate the development and implementation, ensuring a seamless integration of the project into the university's educational landscape.

What types of material will be developed?

A diverse range of materials will be developed to support the teaching and learning. These materials will include instructional videos demonstrating music production techniques, interactive tasks and exercises for hands-on learning, digital resources for music composition and coding, and multimedia presentations showcasing student performances. The materials will be designed to engage students actively, promote their critical thinking, and enhance their understanding.

Does the teaching/learning offer adapt to the learning styles or learning needs of the students concerned?

Recognising that students have diverse learning styles, the project will incorporate a variety of instructional approaches, including visual, auditory, and kinesthetic elements. The materials and activities will provide opportunities for students to learn through experimentation, collaboration, and self-reflection. The project team will be attentive to individual student needs and strive to create an inclusive learning environment that supports a diverse range of learners.

VII) Sustainability (max. 2 pages/3200 characters with spaces)

[If the project proves successful, how can it be transferred to regular operation? Scenarios for use in teaching? What steps have you planned (e.g. changing the examination regulations or adopting the module handbook)? Will the innovative teaching, learning and/or examination formats continue to be available/further developed after the end of the funding?]

To ensure continuity and long-term impact the PULSE project will be transferred to regular operation through:

1. **Integration into the Curriculum:** The project aims to establish PULSE as a permanent course offering within the Institut Musik. This involves working collaboratively with Faculty II, Institut Musik, and administration, to incorporate the project into the official curriculum. This may include adapting examination regulations, adopting a module handbook, and integrating PULSE-related courses or modules into existing degree programs.
2. **Institutional Support:** To ensure the sustainability of the project, it is crucial to secure institutional support and resources. This may involve engaging with decision-makers, showcasing the project outcomes, and highlighting the alignment of the project with the university's commitment to developing innovative post-digital educational spaces.
3. **Faculty Development:** The project team will prioritize faculty development to enhance digital technology-related knowledge and skills. This may include organizing workshops, training sessions, and professional development opportunities for faculty members. By equipping faculty with the necessary expertise, the project's sustainability can be ensured through their continued engagement and commitment to incorporating digital technology in music education.

4. **Collaborative Networks:** Building partnerships and collaborations with other educational institutions, laptop ensembles, and digital music communities will greatly contribute to the sustainability of the project. By establishing relationships with external entities, opportunities for knowledge exchange, joint performances, and shared resources can be fostered. These collaborations can provide a platform for ongoing development, refinement, and dissemination of innovative teaching, learning, and examination formats.
5. **Documentation and Dissemination:** The project will emphasize documentation and dissemination of its outcomes and best practices. This includes creating a repository of teaching materials, assessment formats, and student projects, which can serve as a valuable resource for future educators and researchers. Additionally, the project team will actively share their experiences and findings through conferences and scholarly publications, ensuring the wider availability and further development of the innovative formats beyond the funding period.

Through these measures, the Post-digital Laptop Ensemble at the University of Siegen (PULSE) will thrive and contribute to the university community and beyond.

Attachments:

VIII) [Timetable \(preparation, implementation, and follow-up period\)](#)

Please see the attached Excel spreadsheet.

IX) [Financial Plan \(Please use the Excel spreadsheet provided on the website\)](#)

Please see the attached Excel spreadsheet.

X) [Ensemble template](#)

Please see the attached PDF document.

für das Projekt:

PULSE:
Postdigital Laptop Ensemble
University of Siegen

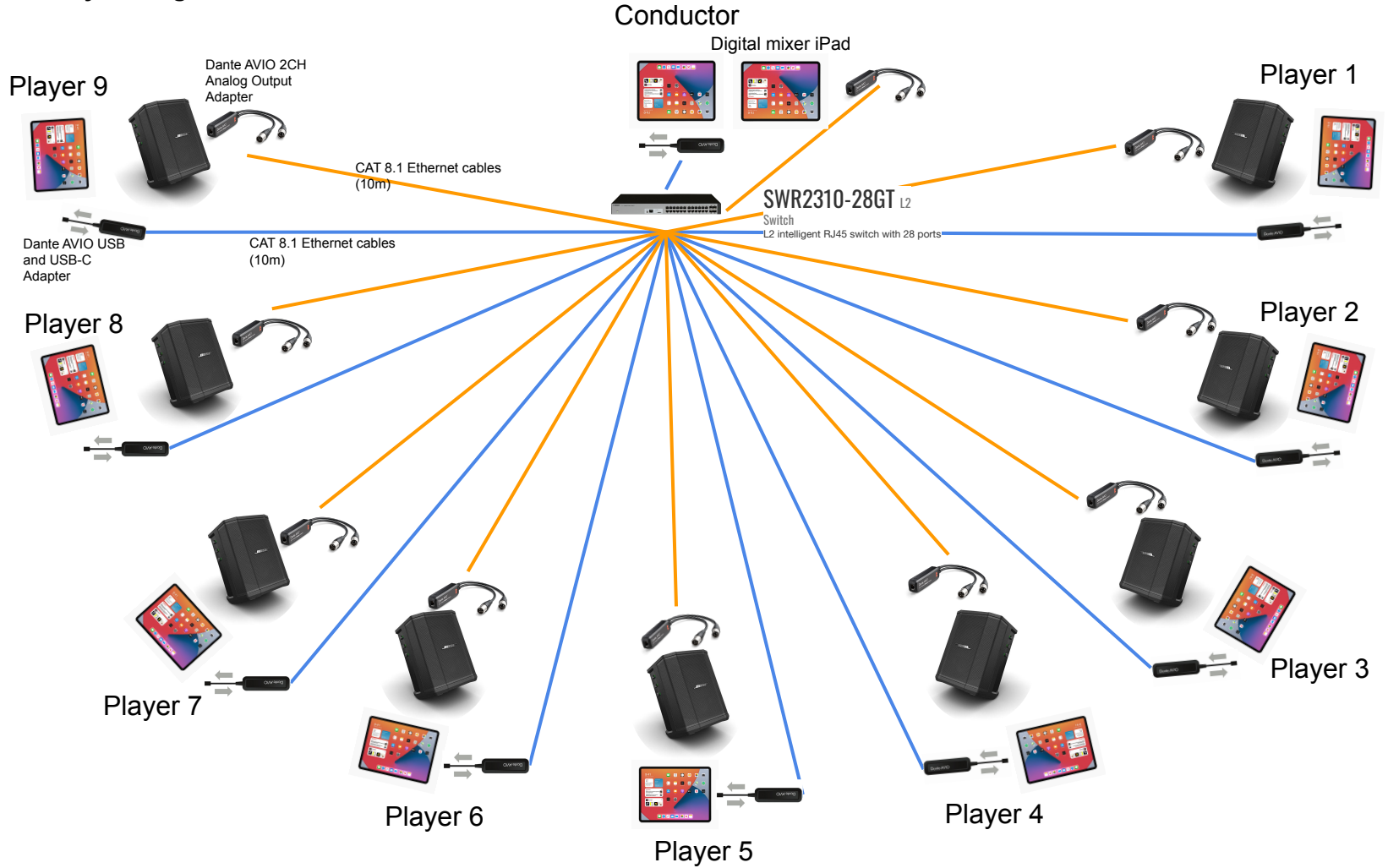
AUSGABEN

Posten	Beschreibung	Anzahl	Kosten	Summe [Euro]
Personalkosten (SHK/WHB)				0,00 €
Materialaufwendungen				19.852,82 €
12.9" iPad Pro	One 12.9" iPad Pro will be used for digital mixing of the ensemble	2	1.030,00 €	2.060,00 €
11" iPad Pro	Smaller 11" iPad Pros will be used by the ensemble members as	9	745,96 €	6.713,64 €
12.9" UAG Metropolis iPad protective case	Protective cases will ensure that the sustained use of the iPads	2	58,00 €	116,00 €
11" UAG Metropolis iPad protective case	" "	9	46,54 €	418,86 €
K&M 19793 Tablet PC-Stativ	Tablet stands will allow the ensemble to perform in various con	11	63,00 €	693,00 €
Yamaha SWR2310-28GT L2 Switch L2 intelligent RJ45 switch with 28 ports	The network switch will allow for the connection of multiple la	1	1.835,97 €	1.835,97 €
Dante AVIO Analog Output Adapter 0x2	The Dante AVIO adapters will enable digital to analogue audio	10	299,00 €	2.990,00 €
CAT 8.1 Ethernet cables for AVB network (10m)	Ethernet cables will be used to connect multiple Laptops/iPads	20	19,99 €	399,80 €
Bose S1 Pro	Speakers will allow for the localisation of audio, allowing the e	9	465,00 €	4.185,00 €
Ensemble floor seats/mat	Floor mats will allow the ensemble members to rehearse and pe	9	48,95 €	440,55 €
				0,00 €
Räumlichkeiten				0,00 €
z. B. Honorare / Reisekosten				0,00 €
Werbungskosten				0,00 €
Gesamtausgaben				19.852,82 €

BILANZ

Gesamteinnahmen	0,00 €
Gesamtausgaben	19.852,82 €
Antragssumme	-19.852,82 €

PULSE:
Postdigital Laptop Ensemble
University of Siegen



Antrag auf Qualitätsverbesserungsmittel

Fakultät II

Bitte beachten Sie:

Pro Semester können insgesamt ca. **16 000,- Euro** vergeben werden. Die Anträge sollten nur in begründeten Ausnahmefällen die Gesamtsumme von etwa 2000 € übersteigen.

Department: **Musik**

Antragsteller*in /

Ansprechpartner*in: **Jun.-Prof. Dr. Lawrence Wilde**

Bewilligungszeitraum: **Wintersemester 2023/24**

Antragssumme: 1.971.00 Euro

Kostenstelle: 203 216

Zielgruppe (Zahl und Studiengang/Studiengänge der angesprochenen Studierenden):

Bachelor- und Masterstudenten der Musik; ca. 15 bis 20 Studenten

Projektdarstellung

Titel:

PULSE: Postdigital Laptop Ensemble University of Siegen

Erläuterung (u.a. Ziele, Kennzeichnung der Innovation, Ablauf, Ressourcen, erwartete Verbesserung der Lehre):

I am writing to apply for “QV Mittel” to fund the **PULSE: Postdigital Laptop Ensemble University of Siegen** project. PULSE is an innovative digital music ensemble that builds on the tradition of the laptop orchestra. The launch of the project is planned for Winter Semester 2023 and it is expected to become a permanent ensemble offering of the Music Department.

The project will function as a post-digital space that engages with the culture of digitality and invites students to think critically about the role of digital technology in their own teaching and learning. PULSE strives to operate as space for future music educators to explore ways of incorporating digital technology in childhood music education and higher education contexts.

The funds, in the amount of 1,971.00 EUR, are requested for the Dante AVIO USB IO Adapters. These adapters will facilitate the operation of multiple devices (e.g., laptops, iPads, etc.) over the Dante audio network for ensemble-based learning and performance. As the adapters are Power over Ethernet (PoE) enabled, they also allow for continuous charging of portable digital devices (e.g., iPads) during the course and in live performance settings.

The development of new teaching and learning formats lies at the core of PULSE as it treats the laptop and other digital devices as effective musical instruments and pedagogical tools. The project encompasses collaborative and interdisciplinary approaches, employs a wide-range of methodologies, and fosters student creativity.

PULSE includes digitally supported teaching, evaluation formats, and competence-oriented learning through music composition and production in Digital Audio Workstations (DAWs), music and multimedia coding (e.g., Max/MSP/Jitter), and design of custom Virtual Studio Technology instruments (VSTi).

The project has immense potential for transfer into society through teach-training and multimedia performances at the University of Siegen, Siegen city, North Rhine-Westphalia, and beyond.

Thank you for your consideration.

Sincerely,
Dr. Lawrence Wilde

Kostenaufstellung:

Artikel	Zahl der Einheiten	Kosten pro Einheit	Total
Dante AVIO USB IO Adapter 2x2	9	€219.00	€1,971.00

Link: https://www.thomann.de/de/dante_avio_usb_io_adapter_2x2.htm

Ort: Siegen

Datum: 09.06.2023



Unterschrift der Antragsteller*in