

NEWSLETTER #1 – June 2025

Welcome note from the Coordinator

Dear Readers,

Welcome to the inaugural edition of the MUSMET newsletter! We are thrilled to share the vision and the initial progresses of our groundbreaking European initiative aimed at shaping the musical dimension of the metaverse.

Our mission is to establish the foundation of a new technology that enables the creation of Musical Metaverse systems and services for musicians and audiences, to achieve novel forms of musical expression and foster music performance and consumption.

To do so, we strongly involve the end users of such technologies in our research and innovation activities, ensuring that the Musical Metaverse is built in compliance with the highest ethical standards and in the interest of society. Let's build the musical experiences of the future – together.

What is MUSMET?

MUSMET ("Musical Metaverse made in Europe: An innovation lab for musicians and audiences of the future") is a 4-year project which has started on the 1st of February 2025. The project is funded by the European Innovation Council under the scheme EIC Pathfinder Open of the European Commission.

The MUSMET consortium comprises 15 organizations from 9 European countries holding advanced and complementary expertise in research, art and innovation programs, as well as in-depth knowledge of music, AI, networking and XR and their application to the Metaverse sector.

For more information visit https://musmet.eu/

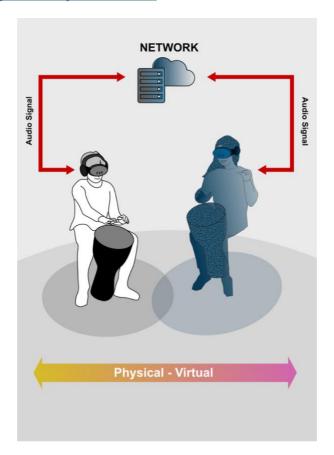
Initial progresses

In the first months the project has already achieved some important initial results:

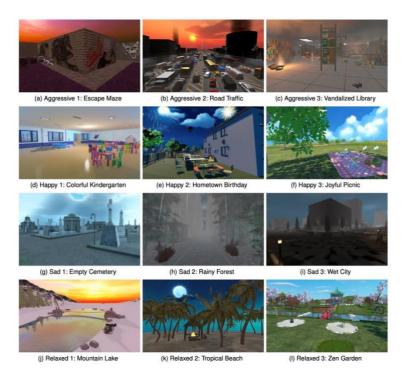
- Studies involving questionnaires, interviews and observations have been conducted with both musicians and audience members to understand their needs and expectations as well as their experience in using Metaverse technologies to create and experience music
- A set of co-design activities have been conducted with musicians in both Virtual Reality and Mixed Reality to collaborative create technologies that address their needs
- Seven scientific papers have already been published or accepted. The full list is available at https://musmet.eu/publications/. The following ones are the most representative of this initial phase of the project:



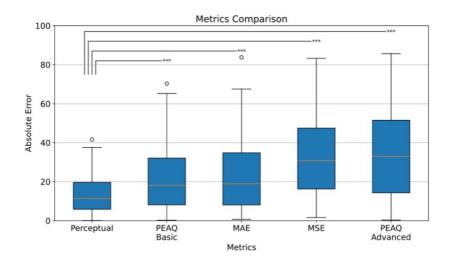
1) A. Boem, M. Tomasetti and L. Turchet. **Issues and Challenges in Audio Technologies for the Musical Metaverse.** Journal of the Audio Engineering Society, 73(3), 94-114, 2025. DOI: https://doi.org/10.17743/jaes.2022.0193



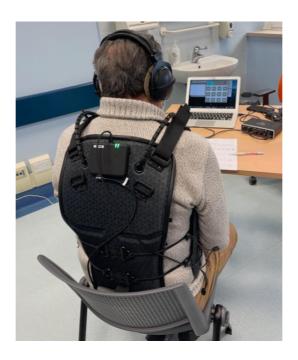
2) L. Turchet, C. Marotta and A. Boem. **Multisensory Music Listening in Affective Virtual Environments.** IEEE Transactions on Affective Computing, 2025 (In press).



3) L. Vignati and L. Turchet. On the lack of a perceptually-motivated evaluation metric for Packet Loss Concealment in Networked Music Performances. Journal of the Audio Engineering Society, 2025 (In press).



4) L. Turchet, R. Rosaia, A. Diodati, and M. Carner. Exposure to vibrotactile music improves audiometric performances in individuals with cochlear implants. Scientific Reports, 15, 20054, 2025. DOI: https://doi.org/10.1038/s41598-025-02946-4



First general assembly meeting

The 1st General Assembly two-day Meeting of the MUSMET Project was hosted by University of Trento in Trento, Italy, on February 17–18, 2025. This gathering brought together distinct industrial, artistic and academic expertise and perspectives, creating a dynamic collaborative powerhouse to revolutionize Extended Reality applications in the musical domain.

The meeting was a good start for discussing not only the objectives and closest tasks to be conducted by the partners but also the interrelations between the tasks and the consortium partners.



Outreach

Some of the consortium members have actively contributed in disseminating the MUSMET vision and initial results via the following talks at events or articles on online magazines:

- 13/06/2025: Article in Italian national press, published on Corriere della Sera, about Prof. Luca Turchet's research "Exposure to vibrotactile music improves audiometric performances in individuals with cochlear implants" published on Scientific reports:

 https://www.corriere.it/salute/ehealth/25 giugno 13/la-musica-grazie-a-un-gilet-vibrotattile-e-a-un-algoritmo-e-possibile-sentirla-anche-con-il-corpo-5c482ba7-94df-458f-8368-7a9bfee62xlk.shtml
- 23/05/2025: Dr. Markus Zaunschirm from Atmoky took part in the panel on "The future of spatial audio for consumers" held in Warsaw at the AES Europe conference of the Audio Engineering Society: https://aeseurope2025.sched.com/event/222fo?iframe=no
- 16/05/2025: Prof. Luca Turchet participated in the online panel "Metaverso ed Atelier Viturali" promoted by Distori Heritage: https://www.linkedin.com/posts/distori-heritage_ti-aspettiamo-allatavola-rotonda-creare-activity-7326541711617232896-TsQm
- 13/05/2025: Dr. Katarzyna Materka from partner 7BULLS participated in the round table "Brilliant idea? EIC Pathfinder as a gateway for breakthrough" held at the EU Innovation Journey'25 conference: https://www.gov.pl/web/eu-innovation-journey
- 17/03/2025: Press article "Musica nel metaverso" Magazine of the University of Trento: https://mag.unitn.it/ricerca/121303/musica-nel-metaverso
- 05/03/2025: Press article "A journey through the musical metaverse" Magazine of the University of Applied Sciences and Arts of Southern Switzerland (SUPSI): https://www.supsi.ch/en/a-journey-through-the-musical-metaverse

The full list of outreach activities in terms of talks and webinars and appearances in the press are available at https://musmet.eu/news/.

Upcoming Events

The MUSMET consortium is organizing the 2nd edition of the IEEE International Workshop on the Musical Metaverse, will take place on October 30th at Palazzo dell'Emiciclo and Gran Sasso Science Institute, in the city of L'Aquila, Italy, as a satellite event of the 6th IEEE International Symposium on the Internet of Sounds. For more information visit:

 $\underline{https://internetofsounds2025.ieee-is2.org/workshops/2nd-ieee-international-workshop-musical-metaverse}$

Notably, the IEEE Metaverse Initiative promotes and supports the 2nd IEEE International Workshop on the Musical Metaverse by providing travel grants for PhD students. Information on how to apply to such grants is available at: https://internetofsounds2025.ieee-is2.org/registration/travel-grants-0

Stay connected!

Thank you for joining us on this journey into the Musical Metaverse. We're just getting started – and your curiosity, creativity, and feedback are essential to shaping what comes next.

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