



2019 Network Performing Arts Production Workshop: At the Crossroads of Music, Technology and Science



A beautiful and sunny day framed the 2019 edition of the Network Performing Arts Production Workshop (NPAPW19) held in Prague, Czech Republic, at the Academy of Performing Arts (HAMU) 2–4 April 2019.

NPAPW is an annual, vibrant hands-on and interactive conference hosted in Europe and the United States in alternate years. It is a single-track workshop during which attendees learn about technologies that use advanced networks to enable arts instruction and performance, experience master classes and live performances, and meet colleagues and representatives from institutions that are advancing this field of work.

The event included presentations, demonstrations and tutorials on the most advanced technology solutions for music and performing arts. This year's edition of NPAPW showcased:

LoLa

Developed by GARR, by musicians (the initial project was designed by Trieste Music Conservatory) for musicians, LoLa is an ultra-low-latency Windows platform that allows synchronous performances above CD audio and HD video quality.

Ultragrid

A cross-platform software application that uses consumer devices for streaming up to 8K resolution video and multi-channel, high resolution audio. Ultragrid runs on standard laptops and is a great entry level tool for musicians who want to start using research and education networks to connect remotely.

MVTP

A hardware low-latency, high-quality streaming solution developed by CESNET (the Czech Republic NREN), offering up to 4K at 60FPS with TICO compression.

Ambisonics

A special audio surround sound format that provides the ability to capture a completely immersive (360 degrees) picture of the environment in which it was recorded.

Four sessions comprised topics ranging from technology for distance collaboration to community projects, from research and experimental work to a very successful panel discussing different aspects of multi-site performances, across three very busy days. The full programme is available at <https://npapws.org/npapw19-programme/>

In addition, the event included the first ever Art & Technology Hackathon (NPAPW HackATHon), where all participants working in teams using LoLa, Ultragrid and MVTP could set up remote connections and create or improvise performances with remote hosts.

NPAPW sits at the crossroads of music, technology and science, in the very spot where these disciplines push boundaries, even challenging each other. It is, in fact, only at this juncture that new spaces are explored, new distances reached and something new, special and unique is created.