

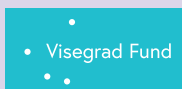
ARTS 5.0

BalletWhere



International Conference on Applications of Virtual Reality in Performing Arts

*Metropol Lake Resort, Ohrid, North Macedonia
18/08/2022 – 20/08/2022*



International Conference on Applications of Virtual Reality in Performing Arts



Program committee

Professor Attila Gilányi, Faculty of Informatics, University of Debrecen, Hungary, expert in the use of virtual reality in arts and in education

Professor Anna Mária Bólya, managing director of the BalletWhere project's Consortium Leader and professor of the Hungarian Dance University, Hungary

Professor Elek Bartha, Vice Rector for Education, University of Debrecen, Hungary

Professor Péter Baranyi, Rector of Széchenyi István University

Professor Róbert Keményfi, Dean of Faculty of Humanities, University of Debrecen

Professor Katarzyna Chmielewska, Kazimierz Wielki University, Institute of Mathematics, Republic of Poland

Professor Sonja Zdravkova Djeparoska, Ss. Cyril and Methodius University in Skopje, Faculty of Music, Republic of North Macedonia

Professor Erzsébet Dani, Head of Department of Library and Information Science, University of Debrecen, Hungary

Professor Péter Lévai, expert on dance teaching methods, Hungarian Dance University, Hungary

Date, venue

18/08/2022–20/08/2022. Conference Hall of Metropol Lake Resort, Ohrid, Republic of North Macedonia.

Program

1st day – 18 August 2022

12:00 AM Arrival.

A private hybrid (online and in person) event. For BalletWhere project participants.

BALLETWHERE



- 3:00 PM Opening.
Anna Mária Bólya.
- 3:15 PM Keynote speech. Title: Presentation of art-related spaces in virtual reality. Attila Gilányi.
- 3:55 PM MaxWhere as a collaborative arena.
Katarzyna Chmielewska.
- 4:15 PM 3D in teaching dance history – the BalletWhere project.
Anna Mária Bólya.
- 4:35 PM Quality digital higher education at the University of Debrecen.
Elek Bartha.

Discussion. Questions.

Section leader as host country researcher: Sonja Zdravkova Djeparoska.

- 5:10 PM Informal meeting and discussion for BalletWhere project members. Welcome drink.

2nd day – 19 August 2022

A private hybrid (online and in person) event. For BalletWhere project participants.

RESEARCH IN PERFORMING ARTS

- 9:00 AM Benesh Movement Notation - A Literacy foundation of Performing Art. Barbara Gabor Haines.
- 9:20 AM Movement structures and body techniques of Olga Szentpál's taxonomy system, Nóra Ábrahám.
- 9:40 AM This is how to do – Methodological proposition of constructive folk dance-pedagogy in dance education. Péter Lévai.

Discussion. Questions.

Section leader: Anna Mária Bólya.

10:15 AM Dance teaching methods – didactic workshop for professional dance pedagogues. Péter Lévai.
Demonstrator dance pedagogues: Sonja Zdravkova Djeparoska, Nóra Ábrahám, Mineá Kropf, Viola Lévai.

11:00 AM Coffe break.

TESTING OF MAXWHERE

11:15 AM Using interactive visualized simulation models in MaxWhere.
Veronika Stoffová.

11:35 AM Testing MaxWhere curriculum at the Ss. Cyril and Methodius University Department of Ballet Pedagogy.
Sonja Zdravkova Djeparoska.

11:55 AM Theoretical background of MaxWhere, cognitive capabilities.
Anna Sudár.

Discussion. Questions.

Section leader: Attila Gilányi.

2:00 PM MaxWhere workshop. Anna Sudár, Attila Gilányi.

Informal programs

4:00 PM Boat trip to St Naum monastery.

8:00 PM Macedonian folklore program.

3rd day – 20 August 2022

Public (online and in person) event.

9:00 AM Dance history lesson in BalletWhere with Macedonian ballet history content. Sonja Zdravkova Djeparoska.

10:00 AM Introduction of MaxWhere, the easy-to-use 3D classroom, on a topical theme: 20th August, Holiday of Ss. Stephen I of Hungary. Attila Gilányi, Anna Mária Bólya.

Questions.

11:00 Closing ceremony.

Sponsors of the BalletWhere event



Abstracts

BALLETWHERE

Attila Gilányi, professor

University of Debrecen, Faculty of Informatics, Debrecen, Hungary

Presentation of art-related spaces in virtual reality

keynote speech

#virtualreality #virtualspacesineducation #virtualspacesinresearch #3d
#maxwhere

Attila Gilányi, mathematician, professor at the University of Debrecen, has been a guest professor among others of the University of Waterloo, Canada, the University of Karlsruhe, Germany, and the Kyushu University, Fukuoka, Japan. His research areas include virtual reality, computational mathematics, mathematical analysis, functional equations and inequalities.

He conducts research on the application of VR in architecture, archaeology and ancient documents since 2015. His significant areas of interest in university teaching are virtual spaces and MaxWhere. In his keynote speech, he will present the basic features and types of virtual reality systems, their usability, the properties of MaxWhere and the advantages of its application in research and higher education.

Katarzyna Chmielewska, professor

Kazimierz Wielki University, Institute of Mathematics, Bydgoszcz, Poland

MaxWhere as a collaborative arena

#maxwherecollaboration #maxwhereinteaching #cooperationineducation

The teaching profession has changed recently due to the pandemic triggered online learning. New methods of teaching, assessing and motivating require new environments for the effective delivery of the educational process. We would like to introduce MaxWhere as a collaborative arena that serves all these aspects. After a keynote speech by Professor Attila Gilányi, the presentation will focus on the use of MaxWhere as a collaborative space. Besides education, there are good examples of MaxWhere being used in this way in higher education.

**Anna Mária Bólya, managing director, research fellow, professor
Arts and Research partnership,
HAA Research Institute for Arts Theory and Methodology,
Hungarian Dance University, Budapest, Hungary**

3D in teaching dance history – the BalletWhere project

#3dclassroom #maxwhere #historyofdance #ballethistory3dclassroom

The university education environment has changed radically. Higher education has become a new global arena for the creation and use of knowledge. The shift to blended, hybrid and online learning, as well as the wider use of learning technologies, offers more opportunities for teachers and trainers. The appropriate use of these technologies requires an in-depth understanding of the advantages and disadvantages of the different formats, as well as the characteristics and needs of students. The presentation will present the aims of the BalletWhere project as part of the dance4you project: to create a research-based curriculum for the MaxWhere space on ballet and to test MAXWhere in dance history and dance education.

**Elek Bartha, Vice Rector for Educational Affairs, professor
University of Debrecen, Department of Ethnography,
Debrecen, Hungary**

Quality digital higher education at the University of Debrecen

#universityofdebrecen #qualityassurancesystem #digitalizationatuniveritites

The University of Debrecen is an extensive educational institution with a long history. It provides high quality education and research opportunities for a wide range of Hungarian and foreign students across a broad spectrum: arts, economics and business administration, informatics, law, science and technology, education for children and special education, music, engineering, agricultural and food sciences and environmental management, medicine, dentistry, pharmacy, public health, health. The Vice Rector for Education, professor, will give a presentation on the quality assurance system and the digital spaces and facilities of the university, which is the main venue for BalletWhere.

RESEARCH IN PERFORMING ARTS

Barbara Gábor Haines, professor

**Dance Faculty – University of Mobile, Alabama School of the Arts,
Musical Theatre Department, Alabama USA**

Benesh Movement Notation - A Literacy foundation of Performing Art

#vr #maxwhere #balletwhere #distanteducation #computerscience

I believe that dance should be studied as a cultural phenomenon which interrelates with other behavioral and conceptual processes. In search of Vaslav Nijinsky's *Le Sacre du Printemps* I had a rare opportunity to meet and study the work of the Bangarra Dance Theatre in Arnhem Land, Australia. It is a company of professional Aboriginal & Torres Strait Islanders who promote awareness and understanding on a 65,000 years old culture. A culture that breathes on visual language based on sacred geometric formations that we can experience in eighteenth century ballet's dramaturg. Finding meaning within the shapes helps us to "See the music, hear the dance," transmute and virtually reshape material culture into the human body. Benesh Movement Notation records the body in the third dimension, uses the fourth to record rhythm, and the fifth to represent all dynamics that are intended choreographically. It is breaking the boundaries between art, music, dance and design by understanding the culture around materials and the ways in which they can navigate us to see the forgotten relationship within various types of art. It is a multicultural approach and the care for conservation, preservation of what we inherit and what we protect for future generations.

Nóra Ábrahám, PhD student

**University of Debrecen, Doctoral School of History and Ethnology,
Debrecen, Hungary**

Movement structures and body techniques of Olga Szentpál's taxonomy system

#bodymovement #structure #dimensionality #analysis

In my lecture, I briefly present Olga Szentpál's theory of defining dance, which is presented based on body use. My research primarily focuses on the Hungarian Movement Art and explores the legacy of Olga Szentpál. Methodology of my research is founded on the theory of the German anthropologist, Christoph Wulf (Wulf 2013). He defined the body as a descriptive tool of culture (Wulf 2013:175). My hypothesis, based on this theory, assumes that body use in

dance can be interpreted as a cultural phenomenon. Firstly, I present the social situation of Olga Szentpál, her studies as she got acquainted with dance. Secondly, I will shortly present the theory that defines the structure of body and dance. I emphasize the coexisting and separate movement structures in society as the basis of movement understanding. The body movement analysis makes the separation of dance structures possible. In my opinion, this system proves the dimensionality of the movement and separates different body techniques from the understanding of movement. This taxonomy system is the basis of Laban kinetography. However, this system is the key to the conscious movement understanding, connects theory with practice, and this is the possibility to apply the 3D planning system. Therefore, the taxonomy system of Olga Szentpál's, what is defined as movement structures, has been reconsidered in my presentation.

Lévai Péter, professor, master teacher

Hungarian Dance University,

This is how to do – Methodological proposition of constructive folk dance-pedagogy in dance education

presentation and workshop

#dancepedagogy #dancedidactics #teachingdance #balletpedagogy
#folkdance

We are all familiar with the stereotype we have heard countless times about dancing and learning to dance: “You don’t have to teach dance, everyone can dance!” We have to realize that this is certainly not the case, in fact, it has never been the case. Understanding and cultivating peasant dance culture (Martin 1970) is a difficult task simply because it is an intellectual and moving cultural heritage that has “extracted” its specific aesthetic value for each age group, but has done so without sacrificing its legacy. and well-functioning cultural elements. For this reason, it is difficult to say what folk dance is (Pesovár 2003). The question arises: then what should we teach the rising generations as Hungarian Folk Dance? (Pesovár 1978)

The answer - a question of point of view - can be difficult or easy. It's easy, as we can say that we need to learn (copy) the existing archival footage, teach it to the young children, and the dance is ready. Well it really looks simple! But let me be a little skeptical... Let's look at another example of teaching-learning, let's say math! The situation is as follows: elementary school first grade Tuesday, September 2nd. Aunt Teacher asks the children to take out

their square grid booklet and pencil, and as long as the children prey on their tools, Aunt Teacher writes the following equation on the board:

$3 + 2 = 5$ then she turns and says to the children: Well, children, copy it nicely into your notebooks that I wrote here!

It is conceivable that children who are now beginning to become familiar with the craft of writing letters and numbers will twist my acorns into the booklet. The teacher aunt is patient and even walks in between the rows of benches and, smiling at the result, remarks: Well, we still have to practice this! And they do, they practice the equation throughout the school year, and by the end of the year, each child can write the task neatly and accurately between the squares in the booklet. Everyone can be satisfied, because what the children write is true, beautiful and accurate.

But here's a little bump... How much do they understand math on their own level? We can safely say that nothing. After all, the essence of education has been omitted, ie the tasks have such a motivating force on them that they themselves desire, research, discover mathematics - arithmetic, geometry, etc. - its laws and meaning and to really see through it, ie the later knowledge and the new knowledge to be acquired, the knowledge can be built on something. Copying in this case is neither education nor upbringing, nor can it be called upbringing, but rather in a negative sense, since taming is one of the negative human-forming processes (Gáspár 2001). Unfortunately, in learning and teaching folk dance, in most cases we have not gone beyond this kind of copying. My pedagogical research is just trying to show how we can teach dance differently — primarily by arousing children's motivation — and incorporating constructiveness. My 3D presentation tries to make this method clear.

In my presentation, we will first review what is needed for dancing. What abilities, motivational tools and external factors. We look at them in a MaxWhere 3D form, which I expressly intend to stimulate thought.

The time of the workshop will be good for trying out a variety of movement games, which have no explicit connection to any dance genre, but are excellent for opening the basics of playful movement teaching and movement learning. We will solve playful and thoughtful tasks together.

Sonja Zdravkova Djeparoska, professor

Ss. Cyril and Methodius University in Skopje, Faculty of Music, Republic of North Macedonia

Professional demonstrator of the workshop.

Nóra Ábrahám, scholarship fellow

Hungarian Academy of Arts, Research Institute for Art Theory and Methodology, Budapest, Hungary

Professional demonstrator of the workshop.

Mineá Kropf, dance teacher and choreographer

Budapest Dance Studio, Budapest, Hungary

Professional demonstrator of the workshop.

Viola Lévai, dance teacher

Goli DanceSpace

Professional demonstrator of the workshop.

TESTING OF MAXWHERE

Veronika Stoffova, professor

Trnava University in Trnava, Department of Mathematics and Computer Science, Republic of Slovakia

Using interactive visualized simulation models in MaxWhere

#animation #modelling #simulation #interactivity #visualization

In teaching, we often use animations to understand dynamic processes and phenomena. This is the case when we want to explain to students how things around us work. Learning is more effective when the visualization of a dynamic phenomenon (its animation) is not static, but dynamic. Thus, animation is not just a projection of a sequence of static images, but animation is created on a mathematical model of the investigated phenomenon implemented on a computer. The image rendering is controlled by an algorithm and by its user-defined parameters. If a relevant mathematical model of the investigated phenomenon is available, the user can implement various simulation experiments to gain new knowledge based on their own observation in the sense of constructivism. Such a teaching method is mainly used in the exact sciences, but it is increasingly being used in other areas, including art, to predict the consequences of certain interventions, the effects of changing the values of certain parameters of the model and external conditions in the form of input data.

Sonja Zdravkova Djeparoska, professor

Ss. Cyril and Methodius University in Skopje, Faculty of Music, Republic of North Macedonia

*Testing MaxWhere curriculum at the Ss. Cyril and Methodius University
Department of Ballet Pedagogy*

#maxwheretesting #universityinskopje #balletwheretesting
#maxwherecurriculum

The professor will present the MaxWhere curriculum testing plan to be launched in the autumn as part of the BalletWhere project. The composition of the group involved in the training of the Faculty of Music, the number of participants and the testing conditions.

Anna Sudár, Business Analyst Lead, PhD student

MaxWhere Ltd., Budapest, Széchenyi István University, Győr, Hungary

The role of MaxWhere in the use of virtual reality in education

#virtualreality #dekstopvr #digitaleducation #cognition #maxwhere

The rapid technological development of computer graphics in recent years has led to the emergence of many applications that combine reality with virtuality using simulation techniques. Just as character-based user environments have been replaced by graphical window interfaces, 2D windows are slowly being replaced by spatial content. Just as the transition from character-based to 2D graphical user interfaces has resulted in a significant increase in user performance, the transition from windows to virtual spaces is expected to result in even greater speed gains. In this way, MaxWhere software can be seen as the next step in helping users seamlessly organize, understand and perceive information in virtual spaces. This technology can bring innovation to many areas, but education is a key area where it can facilitate the deepening of practical and theoretical knowledge through the possibilities offered by virtual spaces.

PUBLIC BALLETWHERE EVENT

Sonja Zdravkova Djeparoska, professor

Ss. Cyril and Methodius University in Skopje, Faculty of Music, Republic of North Macedonia

Macedonian ballet – short historical review

dance history lesson in BalletWhere with Macedonian ballet history content
#culturalpolicy #ballet #nationalballet #folklore #macedonia

Ballet art in Macedonia developed in the second half of the 20th century, i.e. after the end of the Second World War. As a precursor in the 20s and 30s we follow several forms of dance activities that influenced formation of the ballet theater. The first performances were carried out in 1949, accompanied by intense and rich stage activity. Professionalization took place alongside the education. The leading element in the repertoire seen from the very beginning until today is the classical ballet performances corpus. According to performance plan, as well as guest appearances, awards and criticism, it can be concluded that the ballet ensemble achieved remarkable results and established itself as one of the pillars of Macedonian culture in the first decade of its existence. The constitutive period was characterized by great interest of the audience, (which was) indicated by the number of performances. Periodically the repertoire was supplemented by national works that incorporated folklore elements. They are especially important due/owing to the need of emphasizing authentic features.

Attila Gilányi, professor

University of Debrecen, Faculty of Informatics, Debrecen, Hungary

Anna Mária Bólya, managing director

Arts and Research partnership, Budapest, Hungary

*Introduction of MaxWhere, the easy-to-use 3D classroom, on a topical theme:
20th August, Holiday of Saint Stephen I of Hungary*

#saintstephensday #foundationofthehungarianstate #christianhungary
#maxwhere

The last public event of the conference will take place on 20 August. This day is the biggest feast day in Hungary and is linked to a saint revered in both the Orthodox and Catholic Churches, Saint Stephen. MaxWhere will present material on Saint Stephen to mark the feast.