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SHARESPACE

Embodied Social Experiences in Hybrid Shared Spaces



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Acronyms and Definitions

Term / Abbreviation	Definition
AI	Artificial Intelligence
AR- XR - VR	Augmented Reality – Extended Reality - Virtual Reality
KPI	Key Performance Indicator

CONTENTS

Contents	2
1 Introduction	3
2 Dissemination & Communication Strategy: Performance Review	4
2.1 SHARESPACE Communication and Dissemination KPIs	4
3 Communication and Dissemination Activities Implemented	6
3.1 Online Channels	6
3.1.1 Project Website	6
3.1.2 Social Media	8
3.1.3 Newsletters	9
3.2 Promotional Materials	10
3.2.1 Printed Materials	10
3.2.2 Multimedia Materials	12
3.3 Publications	13
3.3.1 Scientific Publications	13
3.3.2 Online Articles	15
3.3.3 Press Releases	16
3.4 Talks and Presentations	18
Current Topics in Perception and Cognition – SoSe 2024	19
3.5 Open Call for Artists 2023	20
4 Next Steps	22
4.1 Dissemination events	23
4.1.1 Olympic Games 2024, Paris:	23
4.1.2 IASP 2024 World Congress of Pain	24
4.1.3 Ars Electronica Festival 2024, Linz	25
4.2 Youtube channel	28
4.3 Website update	29
4.4 Open Call for Artist 2024	29
5 Conclusions	30
6 Annex 1: Open Call for Artists 2023	31

1 INTRODUCTION

The current document, D7.2 Interim Communication Assessment Report, is part of SHARESPACE's WP7 – Dissemination, Innovation, IPR and Exploitation and specifically addressed task T7.1 – Communication Activities.

This deliverable offers a detailed overview of all major communication, dissemination, and exploitation activities undertaken throughout the project's duration up to now (M18 of the overall project). The overview is supported by the presentation of quantitative data on the performance of our digital platforms, and descriptions on the participation in both physical and online events. All information presented build directly onto the overall strategy originally described in D7.1 – SHS Plan for Dissemination and Exploitation.

2 DISSEMINATION & COMMUNICATION STRATEGY: PERFORMANCE REVIEW

2.1 SHARESPACE COMMUNICATION AND DISSEMINATION KPIS

As described in D7.1 SHS Plan for Dissemination and Exploitation, the main and key objectives of the dissemination strategy are as follows:

- To set up the information dissemination mechanisms and priorities of SHARESPACE.
- To establish, maintain and grow a community around SHARESPACE in coordination with the stakeholder management framework.
- To create visibility and promote the work and results for target stakeholders by creating promotional material and information campaigns.
- To disseminate projects and outcomes to the widest possible community through various channels and instruments. External participation and knowledge sharing will be encouraged through networking activities and events aimed at increasing the impact potential and enriching the contribution to the project.
- To liaison with other EU, national and international initiatives to maximise the impact.

To achieve those objectives, actions have been undertaken according to the following timeline:

M1-M6: During these initial months the project website and social media channels were set up, the project's visual identity, logo, and assets were created, and the initial identification of stakeholders was completed.

M6-M12: The focus during these months was to increase the visibility of the project by the repeated participation in events, such as conferences, festivals, and EU-events, and consistent postings on the social media channels. Lastly, the preparation and the first round of execution of the Open Call for Artists took place which increased the visibility of the project in the media art community.

M12-M18: In the overall project, the last six months were about developing the SHARESPACE technology to a point where it can be utilized for the scientific proof-of-principle research and the execution of the real-world scenarios. This development process led to material that could be distributed through our communication channels. Furthermore, during these months the focus was on the preparation of the real-world scenarios at important visibility events such as the Olympic Games 2024, the Ars Electronica festival 2024, and the World Congress of Pain 2024. To maximize the impact, SHARESPACE videos explaining the project's content were shot and are currently being prepared for publication.

In the table below you can find an overview of the Communication and Dissemination KPI, and their current standings after 18 months of the SHARESPACE Project.

Measure	Indicator	Target	M18
Website	Unique number of visitors per month	500+	2327 on average
YouTube Channel	Number of videos over the course of the project	15-30	16
Press releases	Number per year through communication departments of the partners.	3-4	8 in total
Scientific publications	Number of peer reviewed papers	30+	13
Social Media	Number of impressions per month	100+	984
Open Access	Number of downloads	1000+	1744
Open Calls	Number of Open Calls	2	1
Non-scientific publications	Number of non-scientific publications	50+	17
Workshops	Number of SHARESPACE Workshops	2	0
Events/fairs	SHARESPACE representation at events and fairs	20	27
Newsletters	Number of newsletters over the course of the project	6	2

Table 1: Overview Communication and Dissemination KPIs

3 COMMUNICATION AND DISSEMINATION ACTIVITIES IMPLEMENTED

The executed communication and dissemination activities up to month 18 have been focused on increasing the project's visibility, reaching out to stakeholders, communicating scientific results, and creating the framework for the dissemination activities of the three real-world scenarios that will all be executed over the summer of 2024.

The following chapter presents information and descriptions of the executed communication and dissemination activities focusing on:

- The online channels such as the project website, the social media channels, and the newsletters.
- The created promotional materials for the project.
- The scientific and non-scientific publications surrounding the project.
- The SHARESPACE Talks and Presentations
- The reflection of the first round of the Open Call for Artists 2023.

3.1 ONLINE CHANNELS

3.1.1 Project Website

The official project website for the SHARESPACE project is www.sharespace.eu. On the website you can find the following information:

- The project description, objectives, and vision.
- An explanation of the different work packages.
- An explanation of the two proof-of-principles.
- A description of the three real-world scenarios.
- An explanation on the Ethics by Design approach.
- Partner descriptions.
- A page dedicated to the Open Call for Artists.
- A publications page including the scientific publications, public deliverables, and newsletters.
- A news & events page.
- A contact page.

Monthly history

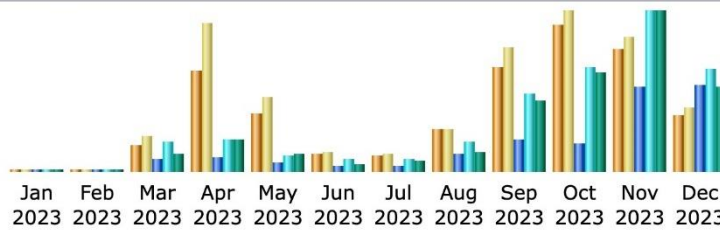


Figure 1: Visitor numbers 2023

Monthly history

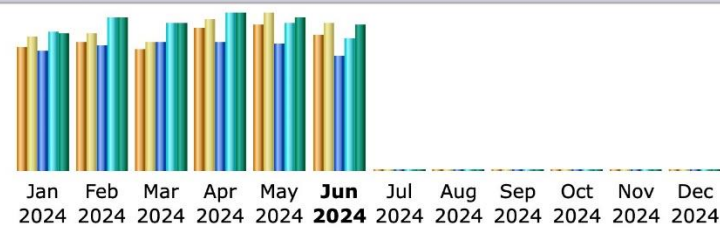


Figure 2: Visitor numbers 2024

Interesting in the numbers presented in the figures above is that there is a clear spike in the amount of unique visitors after the announcement of the Open Call for Artists 2023. This means that the Open Call announcement is doing its job correctly in creating more visibility and interest for the wider project. As of now, the average of unique visitors per month is 2327, which more than surpasses the set KPI of 500+.

With the upcoming large dissemination events in the summer and the Open Call for Artists 2024 we can expect another spike in traffic coming towards the project website. Therefore, the website content will get a large update in July 2024, since more knowledge and material about the project has been collected. More about this is described in the chapter about the Next Steps.

3.1.2 Social Media

The SHARESPACE Project has been active on social media through three channels:

1. LinkedIn, <https://www.linkedin.com/company/sharespace-eu/> , 215 followers. This channel is used to update on current ongoings within the project, (re)share research results, repost updates from SHARESPACE partners, make contact with stakeholder and interest groups, circulate the newsletter, and promote the Open Call for Artists. LinkedIn is the most active of the SHARESPACE social media channels. The average amount of impressions per month is 984, with the lowest month having 158, and the highest month having 2970.
2. YouTube, <https://www.youtube.com/@SharespaceEU> , 21 subscribers. Within SHARESPACE, we are planning to distribute informative videos about SHARESPACE concepts and research. Considering the first 18 months of the project were focused around preparing the technology and research for the implementation of the real-world scenarios, not many general videos have been created. However, as is explained in 3.2.2. and the chapter about the Next Steps, this is something that is actively being worked on within the project. Currently, the channel contains 17 public videos, with a total of 1554 views.
3. X (formally known as Twitter), https://twitter.com/Sharespace_EU , 129 followers. This channel is used in a similar fashion as LinkedIn, but often in a lot more shortform due to the limited characters that can be incorporated in a posting. The method we used for growing our following on this platform was by actively following other profiles of potential

stakeholders, interest groups, peer projects, and target groups. The amount of average impressions on X furthermore surpasses the set KPI of 100+ impressions a month.

All in all, the overall amount of impressions per month surpasses the set KPIs. However, we are not yet at the amount of desired followers across our social media channels. We do think these numbers will steadily increase over the course of this summer due to the three highly visible dissemination events: the Olympic Games 2024, the World Congress of Pain 2024, and the Ars Electronica Festival 2024. More about these events will be explained in the chapter on the Next Steps. During these events the project will come in direct contact with thousands of people from the general public, scientific community, art community, sports community, target groups, stake holders, and other interested individuals. During this time, we aim to expand our social media presence and grow our following.

3.1.3 Newsletters

So far, two newsletters have been created within the framework of the SHARESPACE project.

1. July 2023: https://sharespace.eu/wp-content/uploads/2023/11/ShareSpace_Newsletter_01.pdf
2. February 2024: https://sharespace.eu/wp-content/uploads/2024/02/ShareSpace_Newsletter_02.pdf

The next newsletter is planned for July 2024, making target groups and interested parties aware of the three large dissemination events happening over the course of the summer (Olympic Games 2024, World Congress of Pain, Ars Electronica Festival).

The newsletters have always been circulated on our social media channels (LinkedIn and X) and are publicly available on the Publications page of our website. Due to this distribution however, we do not have exact numbers on the amount of times the newsletter has been read.

An alternative strategy that can be applied in the future is to have newsletters sign-ups through LinkedIn, so a closer monitoring of the number is possible.

3.2 PROMOTIONAL MATERIALS

3.2.1 Printed Materials



Sharespace is the creation of future Social Hybrid Spaces (SHS) shared by humans and avatars engaged in embodied collaborative tasks, where social sensorimotor primitives are transparently captured through mobile connected innovative sensors, and then reconstructed using novel extended reality (XR) technology. The ambition is to create a hybrid, multimodal-multisensory integrated platform which adapts to individual users and enables them to interact in an embodied shared space by learning, identifying, and reconstructing the core sensorimotor primitives of social interactions.

Three Real-World Scenarios demonstrating the potential of Social Hybrid Spaces:

1. Health: Developing a Social Exergame to treat low back pain
2. Sport: Teaching amateur cyclists to ride in a peloton
3. Art: The development of artistic scenarios to create new forms of collaboration between human and machines for artistic purposes.

Three interconnected science-toward-technology breakthroughs:

1. Novel computational cognitive architectures
2. A unique self-calibrating body sensor network
3. Fully mobile spatial Augmented Reality (AR) and virtual human rendering.

SHARESPACE.eu

German Research Centre for Artificial Intelligence (Coordinator)

UNIVERSITÉ DE MONTPELLIER

CRDC Technologie

UKB

CRIC Nuova Tecnologia per le Attività Produttive Scart

University Medical Center Hamburg-Eppendorf

Alcatel-Lucent Enterprise

UNIVERSITAT JAUME I

Golaem

lillightspace

Golaem S.A.

Lightspace Technologies SIA

CYENS

RICOH

Dyens Center of Excellence

Ricoh Europe

Inria

ARS ELECTRONICA FUTURELAB

Institut national de recherche en sciences et technologies du numérique

Ars Electronica Linz GmbH & Co KG

Vall d'Hebron

DE MONTFORT UNIVERSITY LICCIANO

Hospital Vall d'Hebron

De Montfort University

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The creation of Shared Hybrid Spaces shared by humans and avatars using novel extended reality (XR) technology.

www.sharespace.eu

Figure 3: SHARESPACE Flyer

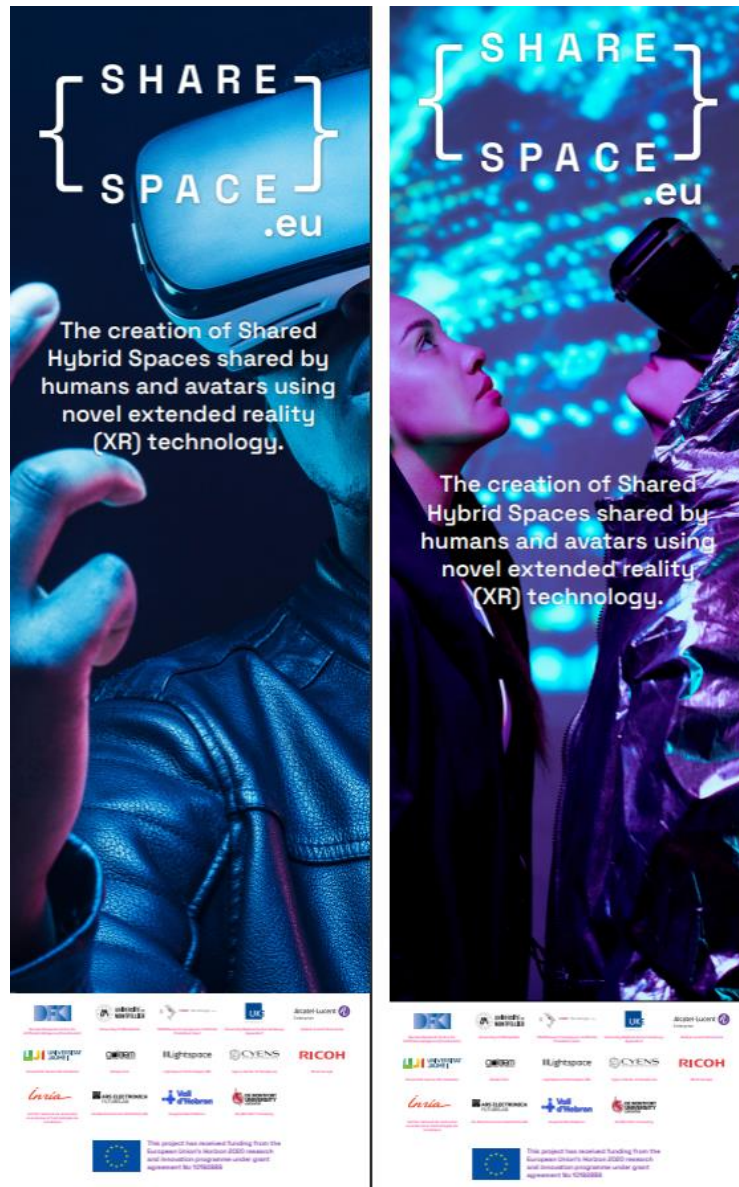


Figure 4: SHARESPACE Roll-ups

In the figures above you can find materials that are prepared for printing whenever that is deemed useful for dissemination events. Figure 3 depicts a flyer that can be printed on A4 format and needs to be folded twice inward. The flyer contains information on the general project, its objectives and visions, its real-world scenarios, and on the participating partners. Figure 4 depicts two versions of a roll-up that have been designed. These roll-ups can be printed for conference booths, consortium meetings, or other events where SHARESPACE is represented. Its stark colours give it a unique and modern look.

3.2.2 Multimedia Materials

SHARESPACE aims to explain its research content and technologies through videos on YouTube. The KPI for video distribution is 5-10 a year. The table below gives an overview of the videos that are currently created for the project.

Title	Description
SHARESPACE Open Call for Artists 2023	This video contains information on the Open Call for Artists 2023 and is supposed to be an inviting video that draws interest. The video was shown on a loop at the SHARESPACE booth at the Ars Electronica Festival 2023.
SHARESPACE Panel Discussion at the Ars Electronica Festival 2023	This is a recording of the panel discussion that was hosted at the Ars Electronica Festival 2023. The panellists include core SHARESPACE researchers and they explain core concepts and research goals.
SHARESPACE Logo Animation	This logo animation ensures a more monogamous look of all SHARESPACE videos and adds to the visual identity of the project.
D3.3: Hand Kinematics	Demonstration video on D3.3.
D3.7: Multi-sensors and Multifocal XR display	Demonstration video on D3.7.
D4.3: Data Driven Animation of SHARESPACE Avatars	Demonstration video on D4.3.
D4.5: Style Preserving Animation of Avatars	Demonstration video on D4.5.
D4.9: Photo-realistic scene neural rendering	Demonstration video on D4.9.
D5.6: Full Body Avatar Animation	Demonstration video on D5.6.
D5.6: Lipsync Rendering Same HMD	Demonstration video on D5.6.
D3.1: Self-calibrating ego-centric visual-inertial body tracking	Demonstration video on D3.1.
D5.6: Lipsync Rendering Side	Demonstration video on D5.6.
D4.7: Social Adaptation of Avatar Animation in XR Environments.	Demonstration video on D4.7.
D6.3: Integrated SHARESPACE Prototypes. Health Scenario Part 1	Demonstration video on D6.3.
D6.3: Integrated SHARESPACE Prototypes. Health Scenario Part 2	Demonstration video on D6.3.
D6.3: Integrated SHARESPACE Prototypes. Art Scenario	Demonstration video on D6.3.
D6.3: Integrated SHARESPACE Prototypes. Sport Scenario	Demonstration video on D6.3.

Table 2: Overview YouTube content

To ensure we have more videos on our YouTube channel that appeal more to the general public, and to make people understand SHARESPACE concepts, research, and technology, more general

explanatory YouTube videos are shot and are currently being edited. More about this campaign is explained in the chapter on the Next Steps.

3.3 PUBLICATIONS

3.3.1 Scientific Publications

In the table below you can find all scientific publications up to month 18.

Category	Title	Platform	Status	Open Access downloads/Citations	Access link
Journal	CT-DQN: Control-Tutored Deep Reinforcement Learning	PMLR (Proceedings of Machine Learning Research)	Published	N/A	https://proceedings.mlr.press/v211/dellellis23a.html
Journal	Kinematic priming of action predictions	CellPress	Published	5 citations Number of downloads not provided by publishers	https://www.sciencedirect.com/science/article/pii/S0960982223006875
Journal	Local convergence of multi-agent systems towards rigid lattices	IEEE Control Systems Letters	Published	1 citation, 315 full text views (as of 04/07/2024)	https://ieeexplore.ieee.org/document/10160116
Journal	Distributed control for geometric pattern formation of large-scale multirobot systems	Frontiers in Robotics and AI	Published	3600 total views, 310 downloads, 1 citation (as of 04/07/2024)	https://www.frontiersin.org/articles/10.3389/frobt.2023.1219931/full
Journal	Continuification control of large-scale multiagent systems under limited sensing and structural perturbations	IEEE Control Systems Letters	Published	3 citations, 383 full text views (as of 04/07/2024)	https://ieeexplore.ieee.org/abstract/document/10153765
Journal / conference proceeding	eXtended Reality of socio-motor interactions: Current Trends and Ethical Considerations for Mixed Reality Environments Design	ACM	Published	170	https://doi.org/10.1145/3610661.3617989

Journal	Action prediction in psychosis	SpringerNature	Published	1264	https://rdcu.be/dvFxW
Conference paper	Data-driven design of complex network structures to promote synchronization	American Control Conference 2024	Accepted for presentation	N/A	https://arxiv.org/abs/2403.06557
Journal paper	Guaranteeing Control Requirements via Reward Shaping in Reinforcement Learning	IEEE Transactions on Control Systems Technology	Published	79 full text views (as of 04/07/2024) N/A	https://ieeexplore.ieee.org/document/10534075
Journal paper	Data-driven architecture to encode information in the kinematics of robots and artificial avatars	IEEE Control Systems Letters	Accepted for publication	N/A	https://arxiv.org/abs/2403.06557
Conference paper	Learning-based cognitive architecture for enhancing coordination in human groups [submitted to 5th IFAC Workshop on Cyber-Physical Human Systems]	IFAC-PapersOnLine	Submitted	N/A	https://arxiv.org/abs/2406.06297
Conference paper	Improving Image Reconstruction using Incremental PCA-Embedded Convolutional Variational Auto-Encoder	WSCG International Conferences in Central Europe on Computer Graphics, Visualization and Computer Vision	Published	N/A	http://wscg.zcu.cz/wscg2024/papers/2024_A97-full.pdf
Springer Book Series Smart Innovation, System and Technologies (SIST), Volume One.	Five Reality Types: The Embedded Ethicist in VR and Mixed Reality Platforms.	<i>Springer Book Series Smart Innovation, System and Technologies (SIST), Volume One.</i> Springer-Verlag. Proceedings from the 8th International Conference on Artificial Intelligence and Virtual Reality (AIVR 2024),	(In Press.)	N/A	https://dl.acm.org/conference/aivr/proceedings

		Fukuoka, Japan, July 2024.			
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Table 3: Overview on Scientific Publications

3.3.2 Online Articles

Date	Dissemination targets	Title	Reference
22.02.2023	DFKI Network	SHARESPACE Project Page	https://av.dfki.de/projects/sharespace/
15.03.2023	DFKI Network	Forschungsprojekt SHARESPACE - Embodied Social Experiences in Hybrid Shared Spaces	https://www.dfki.de/web/news/sharespace-erweiterte-realitaet
21.03.2023	Any Interested parties	Vall d'Hebron hosts a meeting of Sharespace, a European virtual reality Project	https://vhir.vallhebron.com/en/society/news/vall-dhebron-hosts-meeting-sharespace-european-virtual-reality-project
n.a.	Any interested parties	SHARESPACE Project Page	https://ars.electronica.art/futurelab/en/projects-sharespace/
03.05.23	Any interested parties	EU project for radically new extended reality	https://ars.electronica.art/aeblog/en/2023/05/03/eu-project-sharespace/
09.23	Upper Austria Business	SHARESPACE Mentioning in the Business Upper Austria Newsletter	https://cdn.mlwrx.com/sys/w.aspx?sub=kreOVtDsgBp-91csh9ohGbF_5HgwyMCgLTW-joajhdRaW6j&tid=Mnozv-1gy0vt&mid=d44a647f&enc=fn8A3PWiULG2z6XJaVa-BClTzIbfXlnLk-oPBLvSlikgk4qAHejBOKvELLIL3Eq0
08.23	Any interested parties	Métavers en Mouvement (Metavers in motion)	https://www.umontpellier.fr/wp-content/uploads/2023/04/LUM_20_2023_web.pdf
26.09.23	Media Artists	Immersive Work Open Call for Ars Electronicas' 'Deep Space 8K'	https://rhizome.org/community/52975/
09.23	Media Artists	SHARESPACE: Call for Media Artists to Make a Work for the Deep Space 8K (Austria)	http://on-the-move.org/news/sharespace-call-media-artists-make-work-deep-space-8k-austria

09.23	Media Artists	SHARESPACE: Call for Media Artists	https://www.cultureagora.com/en/activities/info/sharespace-call-for-media-artists
09.23	Media Artists	Open Call SHARESPACE: Call for Media Artists to Make a Work for the Deep Space 8K, Austria	https://visualartists.ie/advert/open-call-sharespace-call-for-media-artists-to-make-a-work-for-the-deep-space-8k-austria/
09.23	Media Artists	SHARESPACE.eu Open Call	https://ars.electronica.art/news/en/opencalls/
04.09.23	Media Artists	SHARESPACE-Residenzaufenthalt am Ars Electronica Futurelab	https://www.kunstforum.de/nachrichten/sharespace-residenzaufenthalt-am-ars-electronica-futurelab
18.10.2023	Any interested parties	PRESENTATION OF HORIZON EUROPE & H2020 PROJECTS	https://stereopsia.com/portfolio/presentation-of-horizon-europe-projects/
20.12.2023	Any interested parties	MÉTAVERS EN MOUVEMENT	https://www.umontpellier.fr/articles/metavers-en-mouvement
06.02.2024	Any interested parties	Newsletter from Inria: S'échapper du peloton grâce à la réalité étendue	https://www.inria.fr/fr/realite-etendue-sport-ia
08.03.2024	Any interested parties	Sciences Avenir Article: Vélo : un peloton virtuel pour apprendre aux cyclistes quand lancer une échappée	https://www.sciencesetavenir.fr/high-tech/velo-un-peloton-virtuel-pour-apprendre-aux-cyclistes-quand-lancer-une-echappee_177162

Table 4: Overview on Online Articles

3.3.3 Press Releases

Date	Responsible Partner	Title	Reference
15.03.2023	DFKI	Sharespace bringt Mensch und Avatar	https://www.dfki.de/web/news/sharespace-erweiterte-reality

		durch neue Technologie in einen hybriden virtuellen Raum	
26.04.2023	DFKI	EU-PROJEKT SHARESPACE FÜR RADIKAL NEUE XR	https://www.dfki.de/web/news/eu-projekt-sharespace-fuer-radikal-neue-xr
04.05.2023	Ars Electronica	EU Sharespace project for radically new XR technology	https://ars.electronica.art/mediaservice/en/2023/05/04/sharespace/
18.05.2023	Alcatel-Lucent Enterprise	ALE and fourteen European partners collaborate on extended reality SHARESPACE project to create future social hybrid spaces.	https://www.al-enterprise.com/en/company/news/european-sharespace-project?utm_source=linkedin&utm_medium=social&utm_campaign=comms-fx&utm_content=sharespace-project
03.07.2023	UKE	Neues aus der Forschung	https://www.uke.de/allgemein/presse/pressemitteilungen/detailseite_137926.html
01.09.2023	UM	Le Metaversen Mouvement	https://www.umontpellier.fr/articles/lum-un-mag-grand-public-pour-luniversite-de-montpellier
02.10.2023	AE	European research initiative SHARESP	https://ars.electronica.art/mediaservice/en/2023/10/02/open-call-sharespace/

		ACE launches Open Call	
04.10.2023	CrdC	SHARESPACE Open Call for Artists 2023	https://www.crdctecnologie.it/news-eventi/SHARESPACE-Open%20Call%20for%20Artists%202023

Table 5: Overview of Pressreleases

3.4 TALKS AND PRESENTATIONS

Category	Event	Date + Location	Description
Panel Discussion	Ars Electronica 2023	09.09.23, Linz, Austria	This panel discussion was held with different partners of the consortium present (DFKI, AE, GOLAEEM, UKE, DMU) to talk about the general SHARESPACE project and announce the Open Call for Artists 2023.
Panel Discussion	Research to Reality 2024	05.02.24, Brussels, Belgium	SHARESPACE project coordinator Didier Stricker participated in a panel discussion about Virtual Worlds and the Web 4.0, and the European approaches towards these topics.
Presentation of Horizon Europe XR Projects	Stereopsia 2023	09.12.23, Brussels, Belgium	During this event, one of the activities included a presentation of all Horizon Europe projects that currently deal with XR topics. Project coordinator Didier Stricker was present.
Workshop participation	Team and Multiagent Dynamics	26.06.23 & 27.06.23, Naples, Italy	Hosted in Naples, Italy by our SHARESPACE partner CrdC, this workshop engaged with the quantitative research done within the project.
Conference	GDR IG-RV Annual Symposium	30.05.2023 in Lyon, France	Presentation of the SHARESPACE project at the French scientific community if VR.
Exhibition & conference	Vivatech2023	14-17.06.23 in Paris, France	Booth with a VR live demo and videos (including SHARESPACE video), and conference invited on the Ministry of Sports booth about the use of VR in training, including the SHARESPACE project.
Podcast interview	Beyond Phrenology. Bardy's Beat: A Movement Research Odyssey Benoît Bardy #20	11.10.2023	Podcast interview with SHARESPACE researcher Benoît Bardy. He talks about his work as a Euromov researcher and spend some time talking about the SHARESPACE Project.
Conference	Colloque « Le mouvement humain des	1-2.06.23 College de France, Paris	Invited talk “Les défis de la réalité virtuelle pour comprendre et entraîner la performance sportive”

	origines aux olympiades »		
Conference dedicated to industry	Teratec 2024	29-30.05.2024 in Paris	Invited talk in a workshop “Atelier 8 - Technologies, applications et usages du futur”.
Workshop	Current Topics in Perception and Cognition – SoSe 2024	26.06.24	Invited talk https://www.uni-giessen.de/en/faculties/f06/psy/departments-1/generalpsychology/colloquium
Workshop	Advances in Brain Theory 2024	18.06.24	Invited talk
Workshop talk	2023 WORKSHOP Team and Multiagent Dynamics	26.06.2023, Naples, Italy	“Modeling, Control and Design of Artificial Avatars for Human/Machine Interaction in Joint Tasks”
Conference talk	62nd IEEE Conference on Decision and Control	13-15.12.2023, Singapore, Singapore	“Local convergence of multi-agent systems towards rigid lattices”
Conference talk	5th Annual Learning for Dynamics & Control Conference	14-16.06.2023, Palo Alto	“CT-DQN: Control-Tutored Deep Reinforcement Learning”
Conference talk	Dynamics Days Europe 2023	08.09.2023, Naples, Italy	“Advances in machine learning: Towards human like artificial intelligent agents”
Conference talk	Dynamics Days Europe 2023	08.09.2023, Naples, Italy	“Data-driven network design to promote synchronization in complex networks”
Conference talk	CCS/Italy 2023	10.10.2023, Naples, Italy	“Data-driven selection of the structure of a complex network”
Conference talk	American Control Conference 2024	12.07.2024 (scheduled), Toronto, Canada	“Data-driven design of complex network structures to promote synchronization”
Conference talk	11th European Nonlinear Dynamics Conference 2024	23.07.2024 (scheduled), Delft, Netherlands	“Data-driven design of complex network structures to promote synchronization”
AI and Philosophy Ethics Conference	Ethics by Design and Good Enough Ethics (GEE): Synergy in Ethical Tech	19.06.2024 in Gothenburg, Sweden	Accepted Presentation: Symposium for Humanistic AI. University of Gothenburg/Swedish School of Library and Information Science (University of Borås)

AI & VR International Conference	Five Reality Types: The Embedded Ethicist in VR and Mixed Reality Platforms	21.07.2024 in Fukuoka, Japan	Accepted Presentation: 8th International Conference on Artificial Intelligence and Virtual Reality (AIVR 2024)
IASP's 2024 World Congress of pain: Talk at poster session	IASP's 2024 World Congress of pain	07/08/2024 in Amsterdam, The Netherlands	Oral presentation at poster session of SHARESPACE health scenario and results of first usability study. Title: Embodied Social Experiences in Hybrid Shared Spaces for rehabilitation in chronic low back pain
Presentation at exhibitor hub: Innovation Lab	IASP's 2024 World Congress of pain	07/08/2024 in Amsterdam, The Netherlands	Presentation of SHARESPACE and health scenario at the exhibitor hub: Title: SHARESPACE health scenario: Embodied Social Experiences in Hybrid Shared Spaces for rehabilitation in chronic low back pain
Panel Discussion	Ars Electronica Festival 2024	04.09.2024-08.09-2024 in Linz, Austria	This planned panel discussion discusses the processes of the different artists working with the SHARESPACE concepts and technology and its impact and opportunities for the media-art world.
Festival presentation	Ars Electronica Festival 2024	04.09.2024-08.09-2024 in Linz, Austria	During this festival presentation, the team from DeMontfort University is planning to present their 'Good Enough Ethics' framework to the wider public.
SHARESPACE Booth at Olympic Games	Olympic Games 2024	27.07.2024-11.08.2021 in Paris, France	SHARESPACE will be present with a booth at 'Club France' where a simplified version of the Sport VR Scenario is presented to the wider public.
Presentation to the Ministry of Education (CYPRUS)	CYENS	03.07.2024	The CYENS team presented to around 60 members of different bodies (stakeholders, educators, inspectors) of the Ministry of Education Sharespace and other work on Shared XR, Virtual Humans, Digital Twins and how they could potentially be used for educational purposes for different purposes (Creativity, social connection, STEAM, etc.) and audiences (for students, teachers and parents).

Table 6: Overview of talks, conferences, presentations, and workshop participations

3.5 OPEN CALL FOR ARTISTS 2023

The Open Call for Artists was announced and opened during the Ars Electronica Festival 2023. The announcement could be found at the SHARESPACE Booth, was verbally launched during the SHARESPACE Panel discussion, and was openly communicated through the website, social media

channels, and press releases. The application period originally ran until the 19th of November but was ultimately extended until the 30th of November. Due to Ars Electronica’s well-known position in the media-art world, the Open Call was quickly picked up by third party platforms who started circulating the call out of their own initiative (as has been registered in 3.3.2). The official call document, that described the objectives, collaboration circumstances, and research context of the call, can be found in Annex 1A. This call will be thoroughly reviewed and updated for the Open Call for Artists 2024. Due to the wide circulation of the call, we were more than excited with results of the international and diverse applications we have received. In the tables and figures below, you find some facts and numbers about the Open Call results.

Total number of projects in the portal	152
Submissions complete	61
Percentage of applications from females/gender diverse individuals	52%
Number of countries	40

Table 7: Overview of Open Call for Artists 2023 numbers

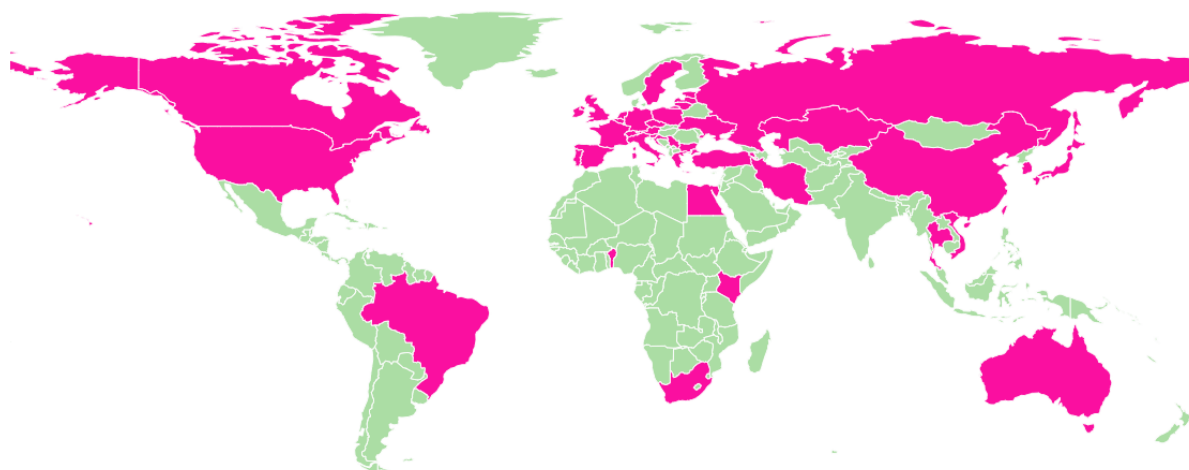


Figure 5: Map of countries that applied for the Open Call for Artists 2023 (marked in pink)

Country	Submissions	Country	Submissions
Canada	4	Ireland	5
United States of America	13	United Kingdom	5
Brazil	2	Belgium	1
South Africa	2	Netherlands	1
Kenya	1	Germany	9
Benin	1	Czech Republic	1
Egypt	3	Poland	9
Iran	5	Sweden	1
Turkey	1	Russia	9
Bulgaria	3	Lithuania	4

Greece	6	Latvia	2
Serbia	1	Estonia	2
Italy	6	Ukraine	6
Croatia	3	Kazachstan	4
Slovenia	2	China	5
Austria	13	Vietnam	2
Switzerland	1	Thailand	2
France	6	Japan	3
Spain	1	South Korea	1
Portugal	3	Australia	3

Table 8: Overview of applications per country

Although we were very happy with the amount of applications we received, in part thanks to the third-party platforms that were circulating the call, we noticed that a significant part was not suitable for the specifications of SHARESPACE. These were applications that:

- Presented already finished previous work that the applicant now wanted to show within the Deep Space 8K environment.
- Lacked the required Unreal Engine Experience.
- Did not mention SHARESPACE technology or concepts.

The reason for this can be multitude. For example, we noticed that not all third-party platforms shared the official Open Call pdf (as presented in Annex 1). If artists found the call through these platforms, they were not able to write fully informed applications. Furthermore, we believe we have received applications from individuals that focused more on the Ars Electronica and Deep Space 8K environment, without considering the framework of the SHARESPACE project.

Now that we have the experience of running the first round of the Open Call, created the first artworks, and have more visual material on the developed pieces, we believe we are able to better communicate the purpose of the Open Call, and increase the quality and amount of fitting applications for the Open Call for Artists 2024.

4 NEXT STEPS

Although M18 marks the official halfway point of the SHARESPACE project, a more unofficial halfway point is right after the summer of 2023. The reason for this being that during the summer SHARESPACE will be presented at three large dissemination events that concern themselves with the VR-phase of the three real-world scenarios: The Olympic Games 2024 in Paris, the World Congress of Pain in Amsterdam, and the Ars Electronica Festival in Linz. In the following we describe these three events, and the outreach we expect to have. We also describe the further dissemination activities that are planned for the second half of the project.

4.1 DISSEMINATION EVENTS

4.1.1 Olympic Games 2024, Paris:

The VR demo of the sports scenario will be presented during the Olympic Games 2024 in Paris, as a demo for the wide public audience. The French Ministry of Research has booked a booth in the “Club France” area, located in “Cité des Sciences de La Villette”, which will host the French fan base. All the French athletes who will win a medal will celebrate their victory in “Club France”. It will be open from July 27th to August 11th, and 70K visitors are expected daily. In the 80m2 booth, Inria will have a place to demonstrate the SHARESPACE results to the sports community and the wide public audience. We are the only place in this booth fully allocated to a unique demo, which is a unique chance for SHARESPACE. The demo will present a simplified version of the VR Cycling scenario, where participants will come on an ergobicycle equipped with IMU sensors to capture the action of the participants on the pedals. Participants will be equipped with an Oculus Pro HMD which will display the Virtual Environment, with tracking of the hands and the head. After a minute of habituation cycling behind simulated virtual opponents, one of them will launch several attacks, with or without amplification, and we will record the reaction time in each condition. The idea is to gamify the demo, and to demonstrate that amplification helps to improve reaction time. If participants agree, their data will be recorded and will be part of the data used for the scientific analysis of this scenario. The ethical committee of Inria has given its approval for this.



Figure 9: experimental setup used for the demo in the Olympic Games for the wide public audience.

4.1.2 IASP 2024 World Congress of Pain, Amsterdam

The real-world health scenario will be presented at the IASP 2024 World Congress of Pain¹, held from August 5 to 8th 2024 in Amsterdam. The International Association for the Study of Pain (IASP) is the most important association leading the dissemination and international policies regarding pain care.

IASP's World Congress on Pain constitutes the largest gathering of pain professionals in the world. This year it is expected to welcome more than 5.000 researchers, clinicians, and health care providers from all over the world and across the different pain disciplines. It is important to note that the World Congress will include the IASP 50th Anniversary celebration with reflections in pain research over the last 50 years. The conference includes a world-class lineup with international speakers and lecturers (including 2 Nobel Laureate Keynote Lectures) covering the latest pain research and treatment. SHARESPACE researchers will be among the speakers and will present the project as a whole and the advances in the health scenario (Extended Reality application to provide physical rehabilitation in chronic pain, and specifically chronic low back pain) at the conference Exhibitor Hub. We will also present the results of the first usability study conducted in Vall d'Hebron Hospital in Barcelona in one of the poster sessions.

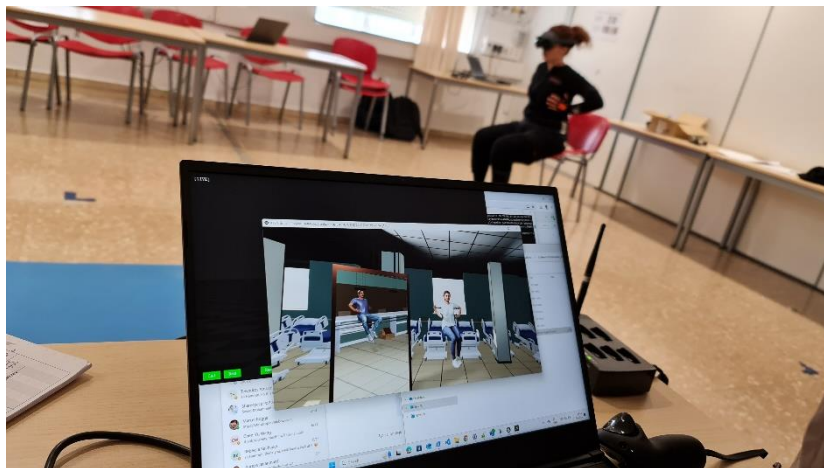


Figure 10: Image of usability study of health scenario at Vall d'Hebron Hospital

¹ <https://www.iasp-pain.org/iasp-2024-world-congress-on-pain/>



Figure 1: Detail of avatar used for usability study

The attendance and presentation of SHARESPACE health scenario at this congress will reach a potential audience of more than 5.000 important stakeholders in the field of pain including researchers, health care professionals (medical doctors, physical therapists, nurses, psychologists, etc.), and health care providers (managers of hospitals, policy makers, etc.). The dissemination of SHARESPACE in this congress will also reach an international audience covering the world.

4.1.3 Ars Electronica Festival 2024, Linz

The real-world art scenario will be presented at the Ars Electronica Festival 2024, held from the 4th of September until the 8th of September in Linz, Austria. The theme of this year's festival is 'HOPE: who will turn the tide'. The festival's goal is to spotlight as many people as possible who have already set out on their journey and whose activities—no matter how big or small—are a very concrete reason to have hope. More information on this year's festival can be found on the website². The Ars Electronica Festival is a rich hub of international scientists, artists, activists, students, developers, designers, and general public. The festival in 2023 pulled more than 88.000 visits and showcased over 1500 initiatives from over 88 countries.³

SHARESPACE will be present during the 2024 festival in the following ways:

- A SHARESPACE Booth at the Open Futurelab exhibition: The Open Futurelab exhibition is found on the ground floor of the main location of the festival, POST CITY. Due to its central location the exhibition is expected to attract a high visitors number. At the SHARESPACE booth, visitors can learn about the general project, the different developed artworks, the

² <https://ars.electronica.art/hope/en/>

³ <https://ars.electronica.art/mediaservice/en/2023/09/11/festivalbilanz/>

Open Call for Artists 2024, and the 'Good Enough Ethics' framework developed by the SHARESPACE ethics team.

- Deep Space Performances: Each of the three artworks developed in this year: State of Play: شهرپازی, Converge, and *falcon heavy have dedicated performance slots in the Deep Space 8K at the Ars Electronica Center. Each performance can host around 50-80 spectators. State of Play: شهرپازی will be shown twice, and the other two works will be shown together in one dedicated slot.
- Futurelab Night: This is an evening organized during the festival where the Ars Electronica Futurelab showcases some of the highlight projects they have been working on during the previous year. Considering both Converge and *falcon heavy have been developed in-house, both of these pieces will be presented during this event.
- Artistic Panel Discussion: This year, similar to the Ars Electronica Festival 2023, a Sharespace pane discussion will be organized. This time, the speakers will be the artists who have worked within the project over last year. The topics discussed will be their processes, and the opportunities they see for the SHARESPACE technology within the media art world.
- 'Good Enough Ethics' presentation. The partners from DeMontfort University, responsible for the Ethics by Design framework within SHARESPACE, plan to present their policy plan of 'Good Enough Ethics' during a keynote talk during the Ars Electronica Festival.



Figure 12: Open Futurelab Exhibition, Ars Electronica Festival 2019. Credit: Philipp Greindl



Figure 13: Futurelab Night Performances in Deep Space 8K, Credit: Florian Voggeneder



Figure 14: SHARESPACE Panel Ars Electronica Festival 2023, Credit: Ars Electronica

4.2 YOUTUBE CHANNEL

One of the plans for the near future is to enrich the SHARESPACE YouTube channel with different explanatory videos of SHARESPACE technology, research concept, and implementations. During the last consortium meeting in Hamburg in April 2024, a videographer shot interview with multiple SHARESPACE Partners. The idea is to release the videos over the course of the summer and autumn of 2024. The videos that were shot will be publicly available on the SHARESPACE website and YouTube channel with the goal to create an understanding of the project contents amongst peers, stakeholders, and target groups. The following videos are planned to be released this year:

1. Explanation on Proof-of-Principle Synchronization
2. Explanation on Proof-of-Principle Amplification
3. Explanation on the Ethics by Design framework with SHARESPACE
4. Explanation on the Health real-world scenario
5. Explanation on the Sport real-world scenario
6. Explanation on the Art real-world scenario
7. Announcement of the Open Call for Artists 2024
8. Deep dive on the different artistic pieces created in 2023.

The idea of creating more videos is not excluded. However, we are currently focusing on the release of these videos in 2024.



Figure 15: Still from YouTube video about the Proof-of-Principle Amplification



Figure 16: Still from YouTube video about the Proof-of-Principle Synchronization

4.3 WEBSITE UPDATE

With the upcoming large dissemination events and the new Open Call for Artists 2024, we can expect the SHARESPACE project, and its social media channels and website to get more attraction. In order to prepare for this, and maximize the impact of the incoming traffic, a large website update in July 2024 is planned. The creation of the planned YouTube videos and the ongoing SHARESPACE research within the PoPs and the real-world scenarios have created a lot more knowledge on the concepts and visual material that can enrich the website. The review of the current website content is planned for July 2024, with the implementation of the changes planned for the end of July 2024.

4.4 OPEN CALL FOR ARTIST 2024

During the Ars Electronica Festival 2024, the Open Call for Artists 2024 will be announced. The application period will be similar to last year, running from September 2024 – November 2024. Due to already having run the open call once and being able to provide exact information and visual content on what the artists have created in the 2023 year of the project, we expect more traction and applications for the open call this year. A revised and more precise version of Annex 1 is currently in development and is agreed upon with the consortium partners.

5 CONCLUSIONS

SHARESPACE has demonstrated its ability in meeting its communication KPIs. As we transition into the next phase, we anticipate continuing down this line, and even increase the communication efforts, especially with the upcoming high-profile dissemination events this summer: the Olympic Games 2024, the World Congress of Pain, and the Ars Electronica Festival. These events provide unique opportunities for direct engagement with stakeholders and interest groups, which will undoubtedly enhance the project's visibility and attract increased interest.

Moving forward, it will be crucial to maintain and expand our online presence. Updating the project website regularly and ensuring that our newsletters reach an ever-growing audience will be key strategies. Now that the VR Phase of the project has concluded, we are better positioned to effectively communicate SHARESPACE's research, concepts, and outcomes to a broader audience.

All in all, SHARESPACE is on a promising trajectory, and with the upcoming events and strategic communication efforts, we are confident in our ability to sustain and build upon this momentum, driving further success and impact for the project.

6 ANNEX 1: OPEN CALL FOR ARTISTS 2023



SHARESPACE Open Call for Artists 2023

Application period: 10th of September 2023-19th of November 2023, 23:59

Introduction

In the near future, more and more communication will occur in digital spaces. This leads to a further blurring of the border between humans and technology, and an increase of their close intertwining in everyday life. Therefore, steering this hybrid future towards the creation of new opportunities for human-centric, safe, rewarding, and inclusive social interaction is vital. SHARESPACE is a Horizon Europe research and innovation project that aims to create future Social Hybrid Spaces (SHS). In these SHS, humans and avatars engage in embodied collaborative tasks. Social sensorimotor primitives, which refers to how people interact and communicate with each other through their senses and movements, are transparently captured through mobile connected innovative sensors, and then reconstructed using novel extended reality (XR) and artificial intelligence (AI) technology, ultimately improving embodied collaboration in digital spaces. SHARESPACE involves a wide range of European universities, companies and institutions from various fields. More information about the project can be found at the URL: www.sharespace.eu

The objectives of the project are evaluated through three real-world scenarios. One scenario concerns art and aims to explore artistic exploitation of SHARESPACE technology and build a bridge to the digital art community. Artistic exploration within these large European R&D projects creates new possibilities for artists to experiment with cutting-edge technologies and realize new artistic concepts. Art is about exploring innovation possibilities along non-predefined lines. This can lead to comprehensive insights that focus not only on the potential successes of a new technology but also on its potential failures.

In this call we are looking for an established media artist to realize their own artistic concepts using the Deep Space 8K, located at the Ars Electronica Center in Linz, and the first prototype of SHARESPACE technology released in 2024. Artists are invited to create a multi-user, hybrid, interactive art performance that leverages embodied interaction between people and different types of Virtual Humans (hereafter referred to as avatars). The developed artwork will be shown at Deep Space 8K at the Ars Electronica Festival 2024. This specific space, unique in the world, allows for immersive and interactive 3D experiences due to high resolution wall and floor projections. The description of the core SHARESPACE concepts and the Deep Space 8K technology can be found in the next section or on the SHARESPACE website. For the realization of the artwork, the artist receives 15.000 EUR that should cover the artists' worktime, material costs, and potential subcontracting

costs. Furthermore, the artist shall receive support from the Ars Electronica Futurelab during the duration of the development phase.

What we look for:

We are looking for an established media artist to deliver a performative artwork that artistically explores different aspects of SHARESPACE's vision and technologies in a novel and challenging way. We are looking for someone who is up for the challenge of participating in an ongoing European R&D project, which entails working beyond disciplinary borders, with developing technology and prototypes and exploring unknown territories. SHARESPACE technology is still in development and only the selected artist will have access to it. In the following, we describe core SHARESPACE concepts that can be incorporated in the artistic concept.

Artistic use of different types of avatars: Since SHARESPACE revolves around embodied collaboration in SHS, the use of digital avatars, which are computer-based simulations of human beings, is central. To reach the goal of improving embodied collaboration, the project is developing different levels of avatars with differing levels of autonomy. The developed artistic concept must incorporate the use of these digital doubles.

- **L0:** A real human in a physical space.
- **L1:** The avatar replicates the movement of a human (L0) in SHS by reconstructing sensorimotor data captured by mobile connected sensors.
- **L2:** These avatars consist of L1 amplified avatars where some movements are exaggerated or slightly modified to foster synchronization and physical involvement of real humans (L0) in digital spaces. These types of avatars are only available at a later stage of the SHARESPACE project.
- **L2.5:** These avatars are specific to Deep Space 8K and base their location in the digital space on the 2D location of a human (L0) on the tracking floor in Deep Space 8K.
- **L3:** The avatar's movements are the sole result of a computation by an AI engine and fully autonomous. The movements of L3 avatars are performed with the objective to support the achievement of a collective goal or foster a feeling of connection.

Remote participation: A core reason to invest in XR research is to increase accessibility to services by enabling remote participation. In this Open Call, we are looking for an artistic concept that integrates a dimension of remote participation from one or multiple people that can be either performers, artists, or audience. The remote participants are then represented by avatars in the digital space in Deep Space 8K. For this artwork, the remote participants are not located in Deep Space 8K, but somewhere where they still utilize the same local network.

Coherence of the group/social connection: SHARESPACE centers around embodied collaboration with multiple people in digital spaces. Research performed in the project shows that successful collaboration invokes a feeling of coherence or social connection in a group. This is something that needs to play a role in the artistic concept for this Open Call. Social connectedness can be integrated across multiple dimensions whether it is a sense of belonging amongst the avatars in SHS or being part of the audience (on site or remotely).

Synchronization: Ongoing research within the SHARESPACE project focuses on invoked social connection amongst a group through synchronous movement. At a later stage of the research, synchronization is integrated as a technical feature of SHARESPACE technology, however, for this Open Call we would like the artist to think of a concept where synchronous movements amongst performers, participants, or audience is integrated.

Amplification: Movement conveys information about human inner states, potentially serving as a social signal to others. At SHARESPACE, our goal is to identify the specific characteristics of

movement that are relevant for social transmission. We then seek to amplify these features to enhance the flow of information between agents in hybrid environments. For this Open Call, we invite artists to explore the concept of amplification and its counterpart, attenuation, and experiment how playing with these concepts can shape social interaction.

Creative use of Deep Space 8K: The conceptualized artwork has to be developed as a Deep Space 8K application. This space, located at the Ars Electronica Center in Linz, enables immersive XR environments through 3D stereoscopic wall and floor projections (both 16m x 9m). Artworks shown in Deep Space 8K can be made interactive by its laser tracking system PHARUS, which enables the system to determine the 2D position of objects on the floor. Potential 3D positions can be determined by giving visitors an OptiTrack device that tracks the position of their hand. Furthermore, Deep Space 8K has space for a total audience of around 80 spectators on the ground floor behind the floor projection and on the mezzanine in the room.

Unreal Engine experience: Working with SHARESPACE technology requires specific technical knowledge. The plugin developed for the creation of the artwork is made for Unreal Engine, so experience with this software is vital for the applicant.

Overall artistic value: For the assessments of the concepts submitted to this Open Call, overall artistic value is an important aspect. It corresponds to the overall artistic excellence of the concept, its novelty, and the way in which the SHARESPACE technology is used in an artistic context.

Technical components available for the creation of the artwork:

For the conceptualization and production of the artwork for this Open Call, the artist is required to work with a pre-defined list of technologies. It is expected that either the applicants themselves have direct experience with the listed technologies and software, or they collaborate with someone who does. The Ars Electronica Futurelab team is available to support conceptualization and production but cannot take on the bulk of development. If the selected artist chooses to collaborate with others through subcontracting the costs must be covered by the budget made available for the production of the artwork. Furthermore, information about the subcontracting must be stated in the application.

The list of tools provided to the Artist:

- **Deep Space 8K**

Immersive XR room at the Ars Electronica center utilizing wall and floor projection.

- [PHARUS tracking system](#):

Allows for the tracking of the 2D position of objects on the Deep Space floor.

- [OptiTrack](#):

Handheld device that allows for the tracking of a 3D position.

- **Unreal Engine with [nDisplay](#)**

Unreal Engine is a powerful software platform used for creating interactive virtual worlds, simulations, and games. nDisplay is a feature within Unreal Engine that allows for the projection of these virtual experiences across multiple screens or display surfaces seamlessly, which is needed for artwork development in Deep Space 8K.

- **SHARESPACE Unreal reference project + plug-in**

The SHARESPACE Unreal Project incorporates the UE-DeepSpace Starterkit, a custom template designed for the Ars Electronica museum's Deep Space screens. It is pre-configured with nDisplay to facilitate multi-screen projections and includes the Pharus tracking system for group interactions. Additionally, the Golaem Crowd plugin is integrated to enable interactive scenarios between the visitor and the digital characters

through Pharus Lastertracking.

- **SHARESPACE Communication platform (Rainbow)**

This platform will provide real-time communication means to animate and render and synchronize avatars remotely based on data collected by Mocap systems and HMD.

- **[Golaem](#) integration for Unreal**

Golaem is the software used for the avatar animation within the SHARESPACE project. The Golaem-For-Unreal Plugin allows playing and interacting in real-time with simulations serialized from Golaem-For-Maya using the Golaem Engine. All attributes of the simulation can be overridden and driven by Unreal Engine native tools (blueprints, scripts...) to generate unique and dynamic simulations.

- **SHARESPACE Cognitive Architecture**

This module stands at the heart of semi-autonomous and fully autonomous avatars. The Cognitive Architecture (CA) is capable of detecting, processing and/or generating human-like movements to achieve enhanced and facilitated group interactions in SHS.

- **(Full-body) motion capture**

The remote user that is located outside of Deep Space must have their movements tracked through motion capture technology. The selected artist has freedom in choosing what tracking technology they find most suitable.

- **Head mounted Display (HMD) for remote user(s)**

The remote user is interacting with the SHS through an HMD.

What we provide:

All coordination between the SHARESPACE consortium and the selected artist is done by the Ars Electronica Futurelab. For the development of the artwork, the selected artist is provided with the following:

- **15.000 EUR in available budget:** The selected artist is contracted by the Ars Electronica Futurelab and will receive a fee of 15.000 EUR for the production and realization of the artwork. This budget should cover all costs including travel to Linz, material costs, working hours, and potential subcontracts.
- **Support from the Ars Electronica Futurelab team:** The Futurelab will provide an Unreal plug-in that integrates SHARESPACE technologies from the project. The use of this plug-in will give artists easy and direct access to all technical components necessary for the realization of artistic concepts. In addition, the Ars Electronica Futurelab team will also support the artist in using the plugin as well as provide support during the conceptualization and production phase of the artwork development. They will also provide the artist with access to Deep Space 8K for testing.

Application Process & Timeline:

Application period (10th of September 2023 – 19th of November 2023):

In order to apply to this Open Call, the applicants are expected to provide the following:

- CV + letter of motivation
- First draft of a concept
- 2–4-minute video explaining:
 - What makes you the ideal applicant for the Open Call?
 - How does your personal artistic experience relate to the SHARESPACE project?

- What do you see as the contributions you can make to this collaboration?
- What is your motivation for your application?
- Artistic Portfolio

You can start your application here (hyperlink to be inserted).

(Optional) Interview with the Jury (December 2023):

Based on the number of initial applications, a selection of applicants will be invited for an interview with Ars Electronica Futurelab members as a first selection round. During the interview, applicants are asked about their ideas for the artwork, and they can ask questions about the wider SHARESPACE project. Based on the assessment of the interview, a selected few will continue to the next selection round, where they will be assessed by the User Advisory Board (UAB) put in place for the SHARESPACE art scenario.

Final Selection by User Advisory Board (UAB) + Notice of Selection (December 2023 / January 2024):

After the interviews a small selection of applicants will be discussed with the User Advisory Board (UAB) that has been put in place for this project. The UAB members are experts external to the Ars Electronica ranging from media artists, performers, and XR specialists. In collaboration with the UAB, the final project will be selected. Important to note: if both the SHARESPACE consortium and the UAB determine that there are no suitable applicants for this Open Call, they have the right to choose none of the applicants and a new Open Call will be announced.

Negotiation (January 2024):

During this phase the contract is put together and negotiated. Timelines are discussed and any other legal requirements and budgets are agreed upon. Since SHARESPACE is upholding an Ethics By Design approach, ethical approval of the concept is also necessary. Agreement of the negotiation is mandatory to proceed with the development of the artwork.

Kick-off meeting in Linz + start conceptualization (February 2024):

During this kick-off meeting the selected artist is invited to Linz to get detailed information about the SHARESPACE project and an introduction to Deep Space 8K. The artist gets demonstrations of ongoing SHARESPACE research, and the technology developed by the consortium. The travel costs to Linz must be covered by the budget made available to produce the artwork.

Delivery of the plug-in, start technical production (April 2024):

Although conceptualization of the artwork already starts before April 2024, the technical production can only start in April after the artist is provided with the technical SHARESPACE plug-in by the Ars Electronica Futurelab.

Feedback UAB (July 2024):

The artist will discuss their concept with the UAB to receive feedback and get potential input.

Presentation at Ars Electronica Festival 2024 (September 2024):

The final presentation of the developed artwork will take place during the Ars Electronica Festival 2024, taking place during the second weekend of September. Next to the official presentation, it is expected that the artist will participate in dissemination events that take place at the festival such as a panel discussion about the artistic exploitation of SHARESPACE technology.

Evaluation of the artwork (September 2024 – November 2024):

Because the artwork is developed within the frame of a European R&D project, evaluation of the results and artwork is required. The responsibility for this evaluation lays with the consortium, but the artist does need to be available for any needed input.

