

John Desnoyers-Stewart

Portfolio



John Desnoyers-Stewart is an interdisciplinary artist-researcher who creates immersive installations and performances to encourage new perspectives on immersive technology and to better understand its true potential. Combining his background in engineering and art he is investigating and altering how technology shapes the body and its place in the physical and social world. His multi-user installations transform real bodies into ethereal forms and incorporate physical touch into the virtual world, encouraging immersants to see and experience each other in a new light. Through his artwork and research, he hopes to encourage social connection and collaborative creativity by exploring positive social applications of abstract embodiment in virtual reality.

Star-Stuff: a way for the universe to know itself

2021 (Telepresent VR Experience/Installation)

John Desnoyers-Stewart with music by Dale Nichols

Star-Stuff is an immersive experience created to remind immersants of their fundamental connection to humanity and the Universe. This VR artwork brings two random immersants together remotely to give a new perspective on themselves, humanity, and the Universe.

Floating in space, your hands are transformed into a myriad of constellations while stars emanate from your heart, orbiting your body in a mesmerizing cosmic dance. Moving and playing with the stars, you form a galaxy unique to you and your movement. Time stands still as eons flash by in this meditative experience.

Another person joins the experience, flickering into view in the form of another constellation. The gravitational effects of your bodies guide the stars, forming a collaborative and dynamic sculpture in space as you play and dance together. In Star-Stuff, looking to the stars allows us to see deeper inward, to be a way for the Universe to know itself.

Medium/Technical Description:

Virtual Reality (2x Oculus Quest 2)

Co-present museum version: 2x 5m projections + Kinect v2

Supported in part by:



Select Exhibitions

H.R. MacMillan Space Centre. Vancouver, BC.
December 2022 – Ongoing.

Telefilm Canada Canadian Innovation Lounge
SXSW. Austin, Texas. March 9 & 12, 2024.

VMF Winter Arts. Victoria, BC. February 16–19, 2024.

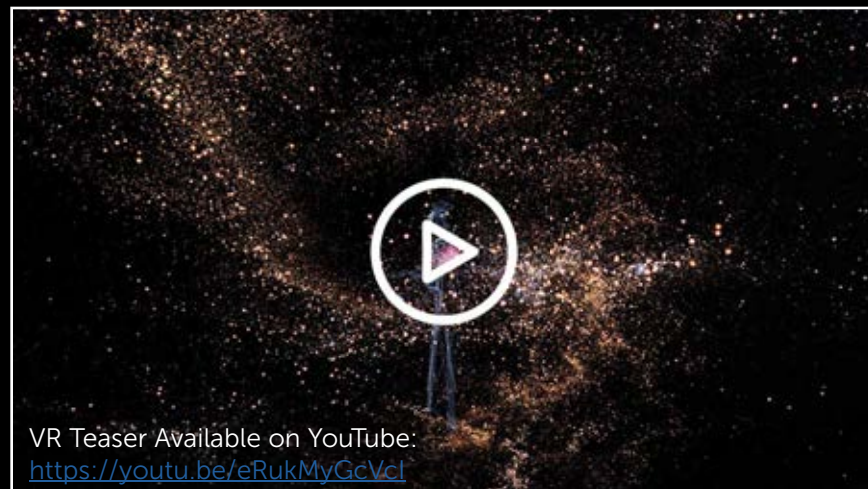
FIVARS 2022. Online + Toronto, Canada.
October 29–November 6, 2022.

VRE Italy 2022. Online + Milan, Italy. October 6–30.

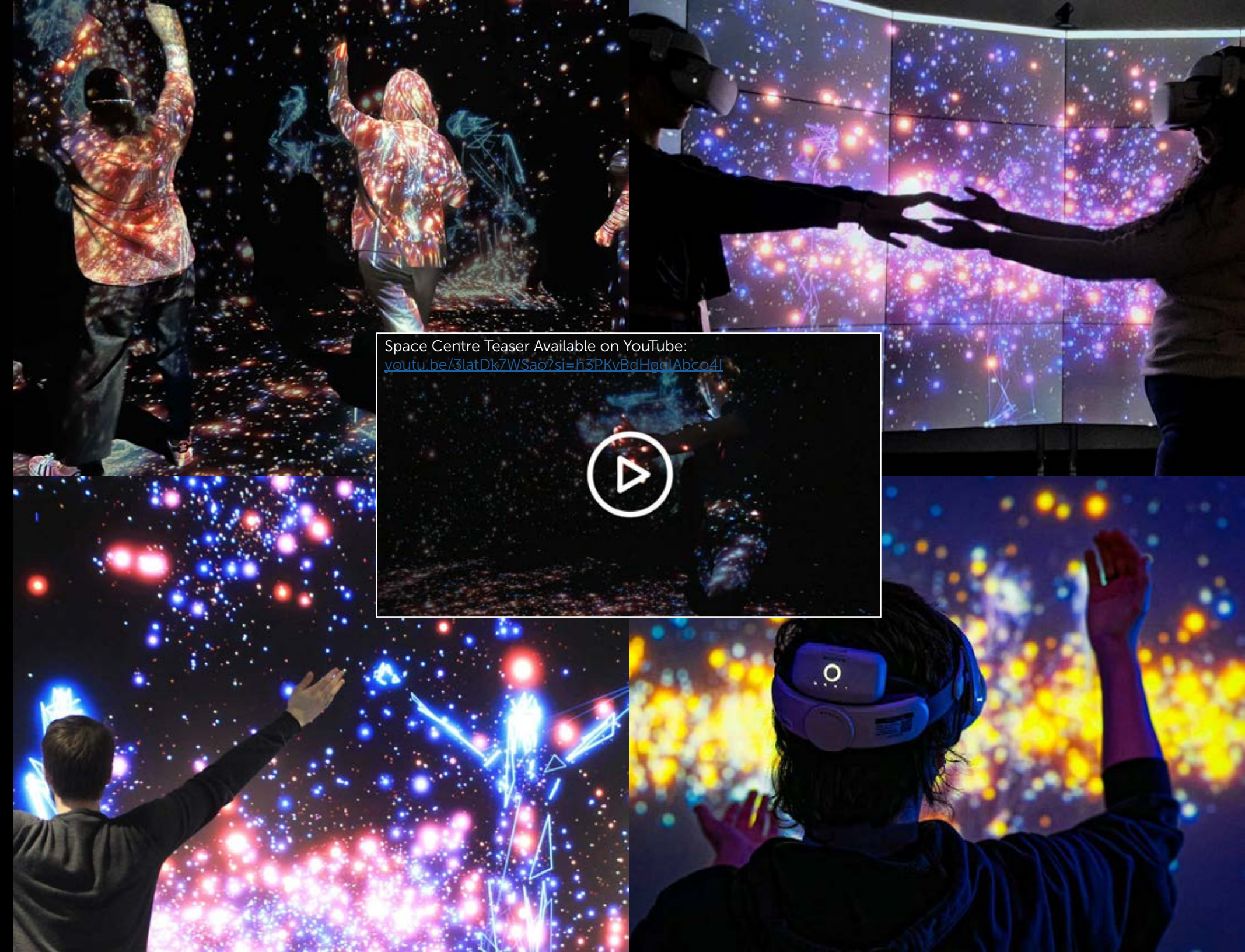
SIGGRAPH 2022 Immersive Pavilion. Vancouver, BC. August
8–11, 2022. <https://doi.org/10.1145/3532834.3536198>

Oculus App Lab. 2022 Quest & Quest 2. <https://www.oculus.com/experiences/quest/3367089710082568/>

V-Unframed 2021, Centre for Digital Media, Vancouver, BC.
October 1–3, 2021. <https://www.alliancefrancaise.ca/v-unframed/en/the-artworks-2021/star-stuff/>



VR Teaser Available on YouTube:
<https://youtu.be/eRukMyGcVcl>



Space Centre Teaser Available on YouTube:
youtu.be/3latDk7WSao?si=h3PKvBdHgcIAbco4I



Eve 3.0: Stories of our extreme selves

2022 (Multi-user live mixed reality performance)
Compagnie Voix

Eve 3.0: stories of our extreme selves is an immersive interactive experience that pushes the limits of what is possible with current virtual reality technology and encourages participants to reflect on the unseen challenges that shape our experience. Six stories are told synchronously through six virtual reality headsets. Each narrative begins with finding the diary of a character dealing with an extreme state of consciousness: addiction, anxiety, depression, obsession, jealousy, and paranoia. The performance unfolds through physical interaction with a live performer, an interactive motion-captured dance, and progresses towards an ending where participants dance freely.

Medium/Technical Description:

Synchronized mixed reality performance (6x Oculus Quest 2)
360 stereoscopic video, Real-time CG, Passthrough video filters
and performer-facilitated tactile embodiment interactions.

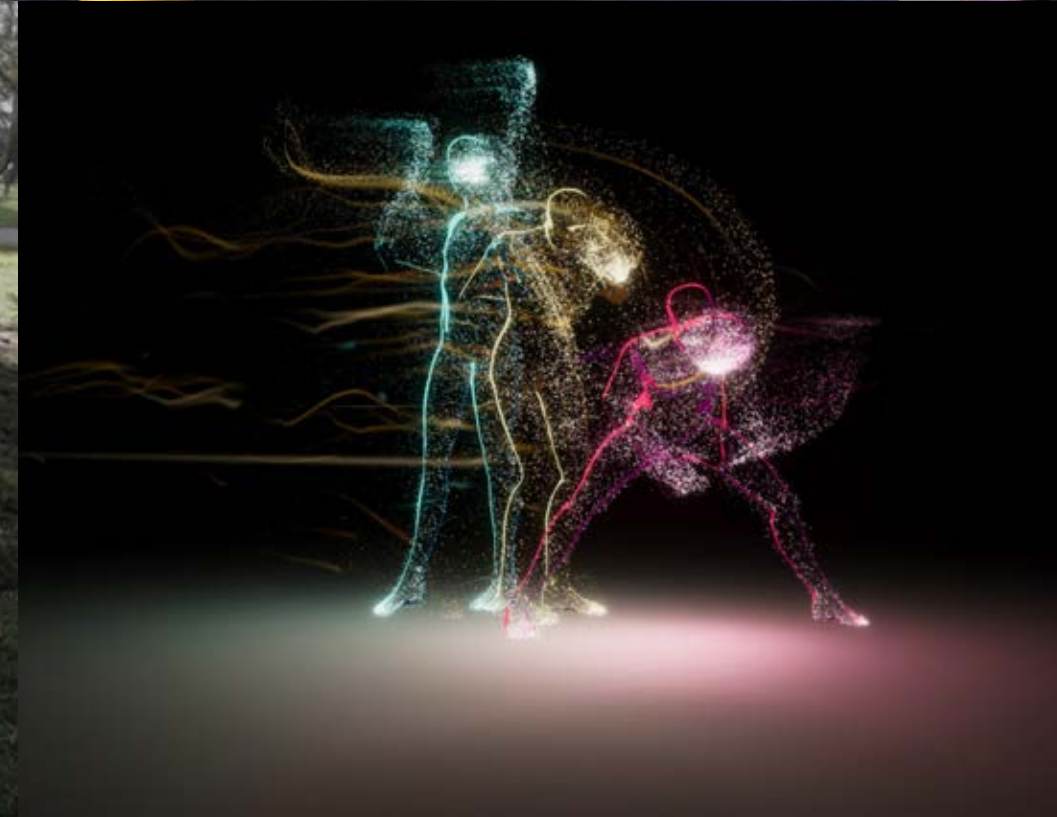
Performances

EVA London 2024. London, UK, July 8–12, 2024.
Leiden University. Leiden, Netherlands. February 27 & 29, 2024.
Filmmaker Expanded 2023. Milan, Italy. November 21–23, 2023.
Les Rencontres ArTec 2023. Paris, France. October, 2023.
ZED Festival 2023. Bologna, Italy. October, 2023.
PAN Festival 2023. Riva del Garda, Italy. June 23–25, 2023.
TIFAWT Rabat Digital Arts. Rabat, Morocco. May 15–21, 2023.
Recto VRso 2023. Laval, France. April 12–16, 2023.
Seesaw House Residency. Riva del Garda Italy, April 1, 2023.
Cinedans 2023. Amsterdam, Netherlands. March 25–26, 2023.
Tanzahoi 2022. Hamburg, Germany. September 9–18, 2022.
RectoVRso 2022. Laval, France. April 12–15, 2022.

Credits

Choreography & Art Direction: Margherita Bergamo Meneghini
Scriptwriter and Choreography assistance: Veronica Boniotti
Scriptwriter and Associate producer: Mark Lee
Producer: Maria Leon Arraez
VR Interaction Concept: Daniel González-Franco
VR development & graphic design: John Desnoyers-Stewart
Visual design: Kirstin Huber, Amira-Sade Moodie
Music composer and sound designer: Dale Nichols
Motion capture: Anastasiia Ternova, Justine Waller
Storyboard: Ari Schneider
Photography: Audrey Planchet, Pietro Lepore
Audiovisual support: Jade Annest, Émilie Léveill , Pietro Lepore
Costume design: Agnese Riaudo
Mocap Dancers:  lise Boileau, Camille Chevalier, Benjamin Labruy re
360 Film Dancers: Maude Doublet-Vigui , David Fleury, Alexi Mondet, Lola Montaut, Charline Regnier, M lissa Vaurin
Voiceover: Maude Doublet-Vigui , David Fleury, Alexi Mondet, Lola Montaut, Charline Regnier, M lissa Vaurin
Supported by Digital Rise, with the participation of Seesaw Project.

Teaser Available on Vimeo:
vimeo.com/834217436



Kingdom of Illumination VR

2023 (VR: Spatialized & Interactive Video)

Brad Necyk, John Desnoyers-Stewart, Gary James Joynes, and Vanessa Goodman.

Kingdom of Illumination VR is an interactive meditation on deep time, eons and the abyss. Be transported to another world and dance with a siren on the edge of the infinite as you reflect on eternity. This artwork explores new ways of blending spatial video with interactive elements to make them feel more present and alive. Videos are layered and spatialized to create a living environment that envelops the immersant in an ethereal motion captured performance while acknowledging their presence.

Medium/Technical Description:

Single User Virtual Reality (1x Oculus Quest 2)

Exhibitions

VMF Winter Arts. Victoria, BC. February 16–19, 2024.

V-Unframed. Curated by Fanny Surzur. Beaumont Studios, Vancouver, BC. November 24–26, 2023. alliancefrancaise.ca/v-unframed/en/the-artworks-2023/



Bardo/Rain is the River is the Ocean

2023 (Performance and Interactive Projection)

Pravin Pillay, John Desnoyers-Stewart, Ruby Singh, and Naomi Jason

Bardo is a reflection on the parallels between the Earth's water cycle and our own life cycles. The background represents the bardo, or intermediary state between lives in buddhist tradition. When a participant joins their body is transformed into rain, as energy from the bardo collect and form a new life. This stage reflects childhood as we learn from our parents, ancestors, and surroundings. Adulthood is represented by a river. Fast moving and ever changing, its force dominates the screen like a river flowing to the ocean. Finally, participants bodies transform into mist, representing old age, death, and a return to the bardo like how water returns to the atmosphere before continuing its cycle once again as rain.

Originally conceived as part of the performance Rain is the River is the Ocean, Bardo was transformed into an interactive immersive projection to inspire reflection and meditation through bodily movement.

Medium/Technical Description:

Interactive Projection (Kinect v2 + Projector + PC)

Exhibitions & Festivals

Telefilm Canada Canadian Innovation Lounge
SXSW. Austin, Texas. March 9 & 12, 2024

VMF Winter Arts. Victoria, BC. February 16–19, 2024.

Xchange #5. Tidemark Theatre. Campbell River, BC. Performed July 5, 2023. Streaming Oct 2023 – Aug 2024. tidemarktheatre.com/event/xchange/

Credits

Concept, Direction, and Live Visuals: Pravin Pillay

Interactive Visuals and Design, Software Development: John Desnoyers-Stewart

Music: Ruby Singh

Dancer (Xchange Performance): Naomi Jason



Synedelica

2022 (Sound Responsive Mixed Reality)
Work in Progress
John Desnoyers-Stewart

Synedelica reimagines what is possible with immersive technology, providing a new perspective on reality. In this synesthetic mixed reality experience, visuals of the real world are modulated by sound, attuning immersants to the beauty hidden in the seemingly mundane. Synedelica shows the world in a new light, rekindling childlike wonder and encouraging exploration.

Medium/Technical Description:

Mixed Reality (Oculus Quest 2) activated by sound

Exhibitions

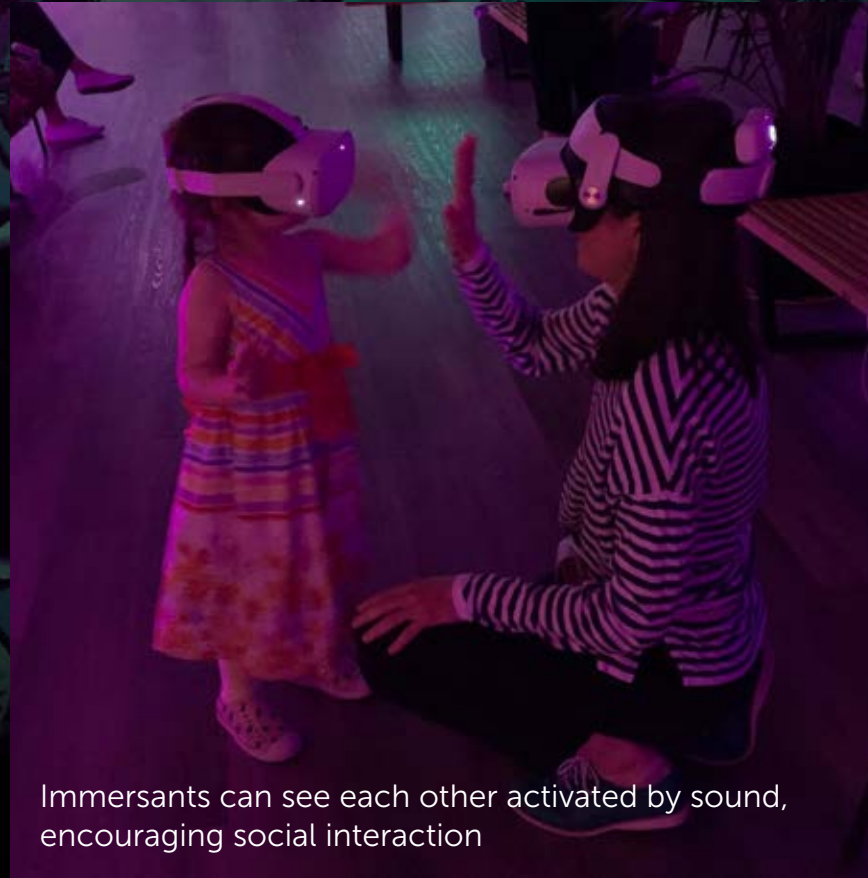
Burn in the Forest 2023. Merritt, BC. July 26–31, 2023

Otherworld 2023. Lake Cowichan, BC. June 8–12, 2023

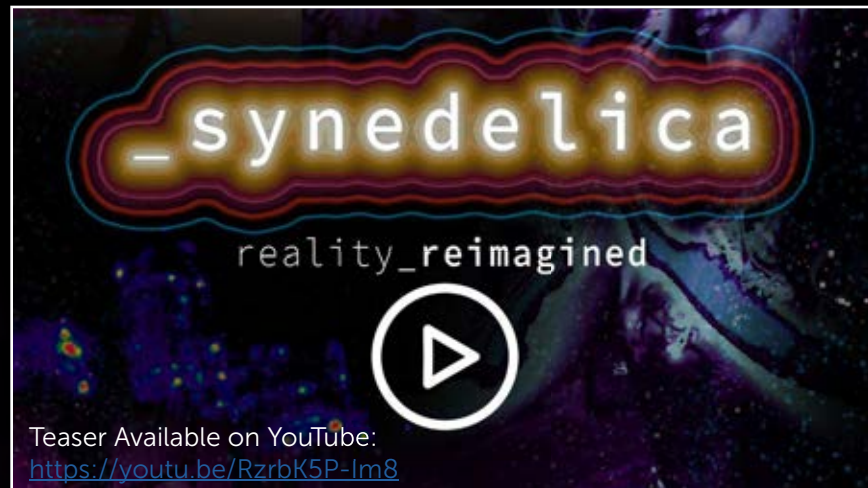
V-Unframed 2022, Centre for Digital Media, Vancouver, BC.

October 1-3, 2021. <https://www.alliancefrancaise.ca/v-unframed/fr/the-artworks-2022/synedelica/>

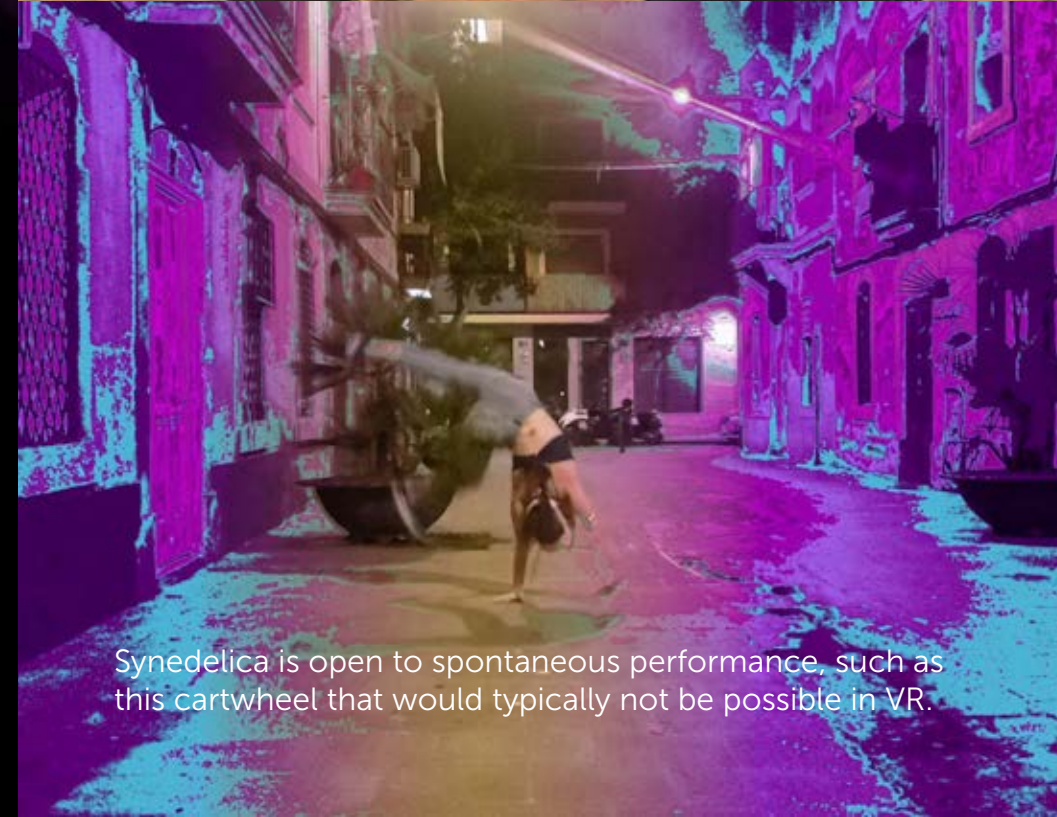
Synedelica remediates other media, creating an entirely new experience



Immersants can see each other activated by sound, encouraging social interaction



The infrared cameras used in Synedelica allow a unique perspective of the ocean.



Costumes designed by Chloe Chua bring Synedelica to life in combination with vibrant flow arts performances.

Créaction: Symbiosis

2022 (VR Experience/Installation)

Sonya Khalfallah Riahi and John Desnoyers-Stewart

Créaction: Symbiosis is an immersive installation that allows two people to collaboratively create enormous dynamic 3D paintings in VR. This installation combines Sonya Khalfallah's gestural aesthetics from her *Traces* series with John Desnoyers-Stewart's approach to facilitating social VR experiences.

Participants wear headsets and paint through amplified gestures that extend far beyond their bodies. Each equipped with a different dynamic brush, participants see only their hands and the traces they create together with their partner, focusing them on their interaction with the sculptural form and with each other.

To spectators, the participants' movements are transformed into a simultaneous dance performance augmented by a colourful tableau. Their movements leave unique, ephemeral traces that briefly linger before vanishing—a kind of temporary virtual imprint that represents the momentary symbiosis in this chance encounter.

Medium/Technical Description:

Virtual Reality (2x Oculus Quest 2)

Co-present version: +1-3 projections in a 5x5 m space

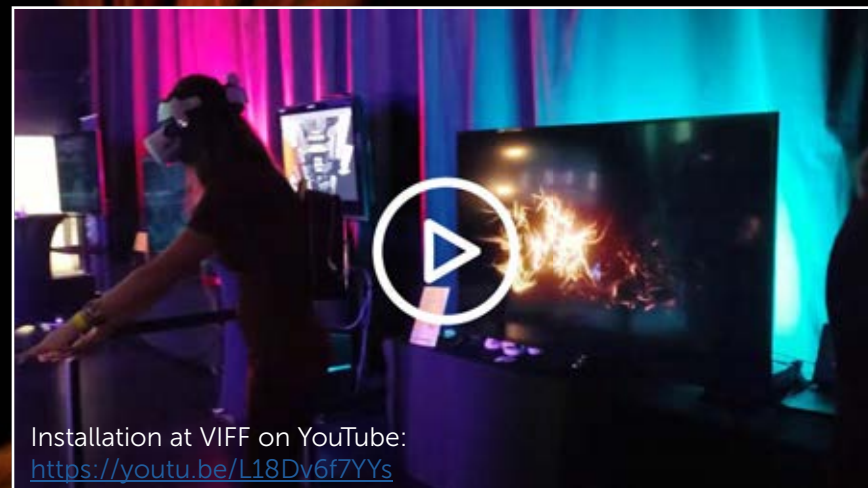
Exhibitions

Recto VRso 2024. Laval, France. April 11–14, 2024.

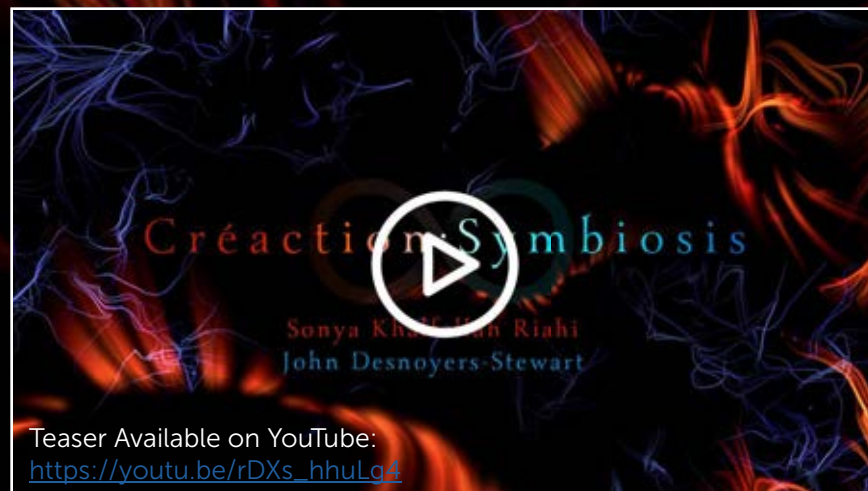
FIVARS 2023. Toronto, ON. September 15–19, 2023. fivars.net/stories/official-selections-2023/creaction-symbiosis/

Valuers de L'empreinte. Lyon, France. March 24–25 2023. fabula.org/actualites/108024/valeurs-de-lempreinte.html

Signals @ Vancouver International Film Festival 2022. CDM, Vancouver, BC. October 1–3, 2022. viff.org/signals/



Installation at VIFF on YouTube:
<https://youtu.be/L18Dv6f7YYs>



Teaser Available on YouTube:
https://youtu.be/rDXs_hhuLg4



Embodied Telepresent Connection

2022 (Telepresent VR Experience Workshops)

John Desnoyers-Stewart, Katerina Stepanova, Pinyao Liu Alex Kitson, Patrick Pennefather, Vladislav Rhyzhov, Bernhard Riecke.

ETC (Embodied Telepresent Connection) is an artistic VR project exploring ways of eliciting a feeling of embodied connection telepresently through pseudohaptics. This project emerged during the beginning of COVID-19-related lockdowns when our social interactions began to inhabit nearly exclusively virtual spaces, and the lack of the embodied dimension of connection became more apparent.

When our virtual installations, e.g. Body RemiXer, capitalizing on the power of an interpersonal touch, had to be transitioned to online installations, we decided to embark on this opportunity to explore the potential of VR technology to elicit a feeling of embodied connection and interpersonal touch even in the absence of the actual physical body of another co-located person.

This project constitutes of a series of VR prototypes that investigate an idea of eliciting an illusion of social touch and bodily connection, through visuals, sounds, biosignals and embodied metaphors. ETC allows immersants to interact with another person networked into the same virtual space and represented as an abstract particle aura. The designed interactions provide faint ineffable sensations of physically connecting with another person, supporting sense of intimacy, closeness, and stimulating playfulness and collaborative exploration.

Medium/Technical Description:

Telepresent Virtual Reality (2x Oculus Quest 2)

Supported by:



Exhibitions

Hyper Canada, Winnipeg, MB, Canada. November 18, 2023.

Signals at VIFF 2023. Vancouver, BC. October 1–7, 2023.

Workshops

Simon Fraser University, Surrey, B.C., Canada. November 25 & December 2, 2022.

IRL Lab, University of Santiago de Compostela, Santiago de Compostela, Spain. Oct 25, 2022

Dutch Post-CHI, CWI, Amstedam, Netherlands. June 22, 2022.

Interself 2022: Born or Made, University of Lisbon, Lisbon, Portugal. June 17, 2022.

KTH Interaction Design Team, KTH, Stockholm, Sweden. June 14, 2022.



Video Available on YouTube:
<https://youtu.be/3OW05odYNHI>

supported by
Canada Council for the Arts
Conseil des arts du Canada

Awedyssey

2021 (VR Experience)

Noah Miller, John Desnoyers-Stewart, Katerina Stepanova, Ashu Adhikari, Bernhard Riecke, Patrick Pennefather, Alex Kitson, Denise Quesnel

An Experience developed as an isolation countermeasure for the SIRIUS isolation study which aims to find ways to mitigate the psychological effects of isolation. This research project is run in collaboration between the ESA, NASA, UAE Space Agency, Germany's DLR, and the Moscow IBMP involving experiments from teams from all around the world. A small crew will spend 8 months in isolation, simulating the experience of being on Mars. During that time they will use a VR experience developed in SFU's iSpace Lab to reflect on their connection to earth and humanity as well as the importance of their own mission as a way to feel less isolated.

Medium/Technical Description:

20 minutes - Virtual Reality with eye tracking and interview interaction (HTC Vive, Unity)

Exhibitions & Festivals

Dome Fest West 2024. Boulder, CO. . May 2–5, 2024.

domefestwest.com/2024-dfw-selections/awedyssey

H.R. MacMillan Space Centre, Vancouver, BC. November 23, 2023

V-Unframed 2021, Centre for Digital Media, Vancouver, BC. October 1–3, 2021. alliancefrancaise.ca/v-unframed/en/the-artworks-2021/sirius/

Credits

Experience Design and Development: Noah Miller, John Desnoyers-Stewart, Ashu Adhikari

Direction: Bernhard Riecke

Narrative and Concept: Katerina Stepanova, John Desnoyers-Stewart, Alex Kitson, Denise Quesnel

Research Design: Katerina Stepanova, Noah Miller

Voiceover: Katerina Stepanova

Sound Design: Patrick Pennefather

Collaborators: Alex Stahn, Katharina Brauns, Anika Werner

Body RemiXer

2019 (Interactive VR Installation)

John Desnoyers-Stewart, Ekaterina Stepanova, Bernhard, E. Riecke, Patrick Pennefather

Body RemiXer connects bodies through movement. It is an experiential projection based Virtual Reality installation that explores novel forms of embodied interaction between multiple participants where their bodies mix into a shared embodied representation producing a playful interaction that aims to support the feeling of connection and self-transcendence. Body RemiXer is both an artistic installation and a research platform for investigating the relationship between the body and one's sense of self.

Medium/Technical Description:

Virtual and Mixed Reality (HTC Vive, Unity, Kinect)

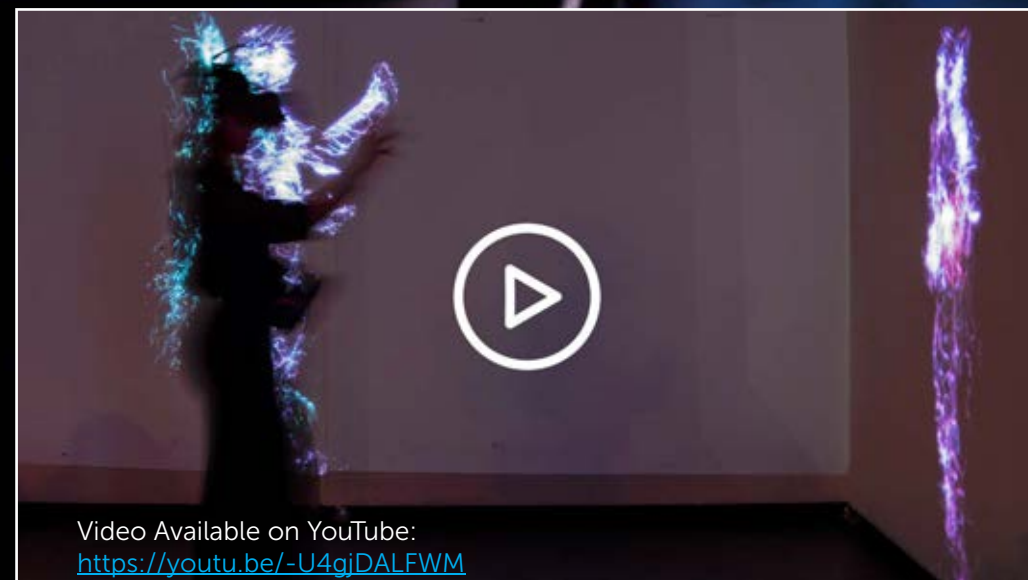
20' x 20' x 10' interactive virtual space with up to three 20'x11' projections

Exhibitions

Archival web version at Recto VRso 2020 Virtual Edition. Online, rectovrso.laval-virtual.com/en/virtual-edition-2020/

Help my Grandma Day, Digital Health Circle, Simon Fraser University, Surrey, BC, Canada, Sep 30, 2019.

The Fun Palace Carnival of Mixed Realities, Center for Digital Media, Vancouver, BC. July 25, 2019.



Body RemiXer [Online]

2020 (Interactive VR Experience)

John Desnoyers-Stewart, Ekaterina Stepanova, Bernhard, E. Riecke, Patrick Pennefather

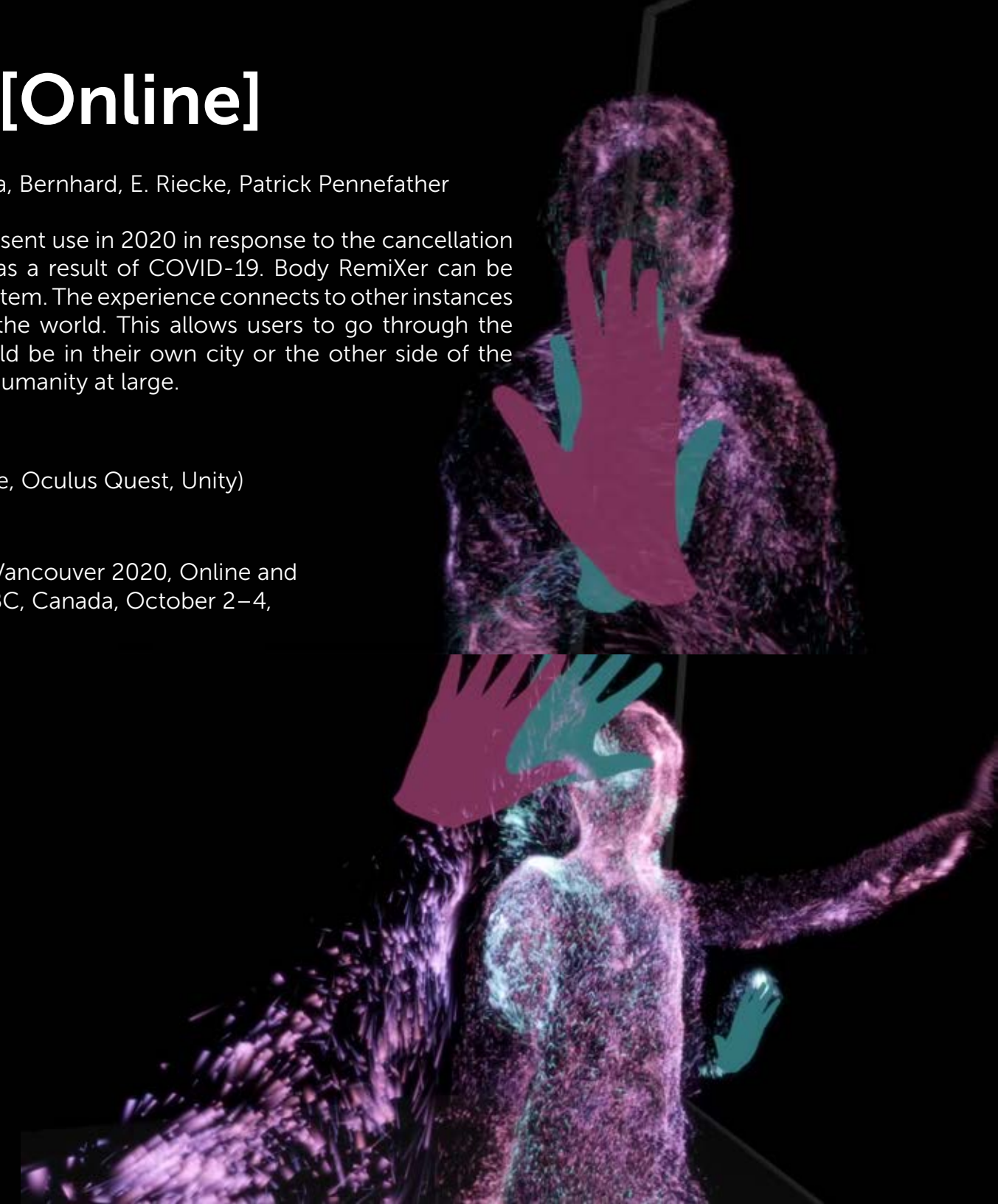
Body RemiXer was adapted for online, telepresent use in 2020 in response to the cancellation of many in-person exhibitions and festivals as a result of COVID-19. Body RemiXer can be downloaded and used on any PC-based VR system. The experience connects to other instances of Body RemiXer running anywhere else in the world. This allows users to go through the experience with anonymous others that could be in their own city or the other side of the world, creating an embodied connection to humanity at large.

Medium/Technical Description:

Multi-user networked Virtual Reality (HTC Vive, Oculus Quest, Unity)

Exhibitions & Festivals

Online downloadable version at Recto VRso Vancouver 2020, Online and at Alliance Française Vancouver, Vancouver, BC, Canada, October 2-4, 2020. alliancefrancaise.ca/rectovrso2020/



Transcending Perception

2018 (Interactive VR Installation)
John Desnoyers-Stewart

Transcending Perception is an interactive Virtual Reality (VR) installation that allows participants to collaborate in the creative, improvisational production of multisensory experiences. Bodies and space are transformed into instruments which translate presence into performance. This installation reminds participants that they are creative, expressive individuals and blurs the boundary between performer and audience. It uses VR to enable extraordinary experiences while collaborating with others, giving participants an opportunity to discover the power of their creativity and to engage with the playfulness at the root of their being.

Medium/Technical Description:

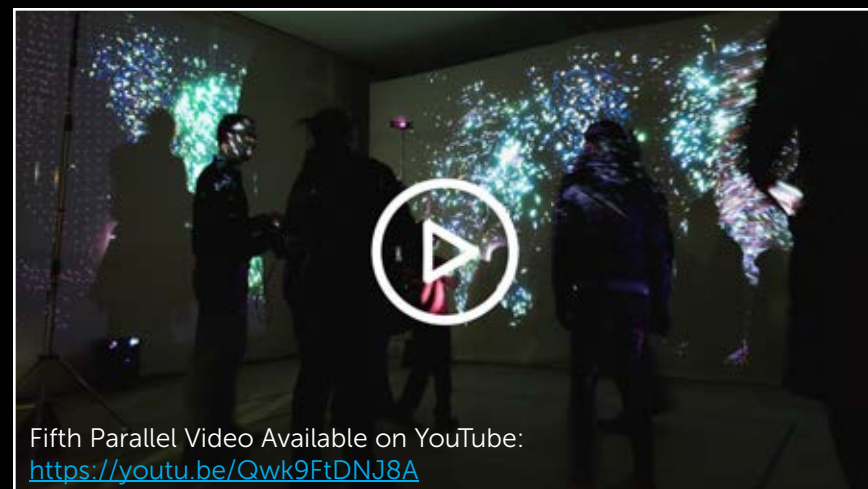
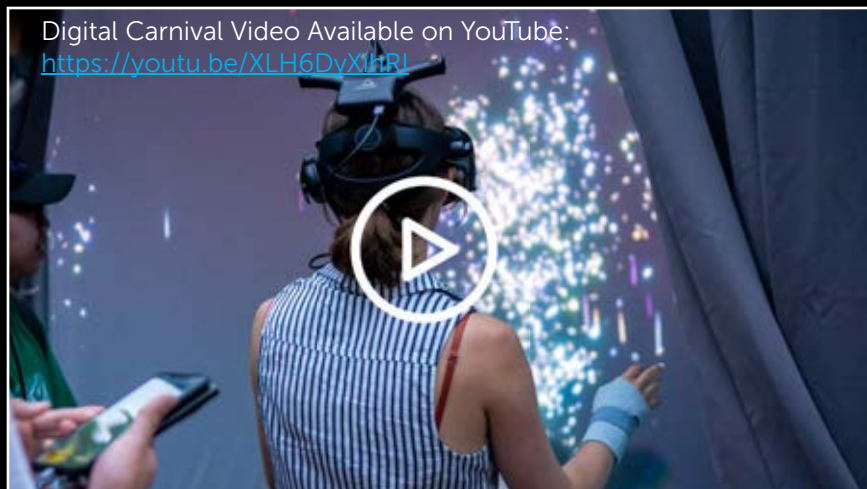
Virtual and Mixed Reality (HTC Vive, Unity, Kinect, Leap Motion, Custom Keyboard)
14'8" x 11'6" 10' interactive virtual space with up to three 20'x11' projections

Exhibitions

Digital Carnival 2019, Richmond World Festival, Richmond, BC. August 30-31, 2019. Performers: Robyn Murray, Kestrel Paton, Charlotte Telfer-Wan, Sarah U Anabelle Wong

Nuit Blanche Regina, Regina, SK. September 29, 2018. Guest artists: Yujie Gao, Carla Harris, WL Altman, Helen Pridmore, Krista Solheim, Tara Solheim, and Clinton Ackerman.

Fifth Parallel Gallery, Regina, SK. April 17-27, 2018. Guest artists: WL Altman, Helen Pridmore, Clinton Ackerman, Megan Smith.



JeL

2018 (Interactive VR Installation)

John Desnoyers-Stewart Ekaterina Stepanova, Philippe Pasquier, Bernhard, E. Riecke,

Medium/Technical Description:

Virtual Reality (HTC Vive, Unity, Max8, Breathing Sensors)

20'x11' projection

JeL is a bio-responsive, immersive, interactive, generative art installation designed to encourage physiological synchronization between the immersants. This project explores how novel forms of interaction can foster the feeling of connection between individuals. JeL allows immersants to explore an underwater environment where their individual breathing controls the movement of a jellyfish. When immersants synchronize their breathing, a coral-inspired structure grows, representing the connection formed between the two participants. Each coral is added to a reef which steadily grows with each interaction. JeL allows immersants to feel connected to each other and nature by collaboratively growing a virtual coral reef through synchronized breathing.



Exhibitions

The Fun Palace Carnival of Mixed Realities, Center for Digital Media, Vancouver, BC. July 25, 2019.

Two participants interacting with JeL—the user on the left interacts with the jellyfish on the left through the projection while the user on the right interacts with the jellyfish on the right using the projection. The jellyfish float in response to the users' breathing and by breathing in sync the users can grow a coral in the center.



Diagram of interaction with JeL showing projection view and progression of coral structure and reef over time. Immersants wear VR headsets and breathing sensors around their abdomen

