

UPDATED JULY 26TH!

# TROIKATRONIX ISADORA:WERKSTATT THE CREATIVITY SERVER BERLIN 2016

THE INTERNATIONAL GATHERING OF CREATORS AND DESIGNERS WHO RELY ON **ISADORA** TO ENHANCE THEIR CREATIVE PRACTICE WILL TAKE PLACE AT THE UFER STUDIOS IN BERLIN, **JULY 27TH-30TH**.

OVER FOUR DAYS, ISADORA'S CREATOR MARK CONIGLIO, THE TROIKATRONIX TEAM AND SPECIAL GUESTS WILL OFFER **WORKSHOPS, PERFORMANCES AND OPPORTUNITIES FOR EXCHANGE AND HANDS-ON INVESTIGATION**.

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# Overview

This calendar is accurate as of 24 July 2016 - but things change! Please check the TroikaTronix website for the most recent information on IsadoraWerstatt 2016. [www.troikatronix.com/Werkstatt2016](http://www.troikatronix.com/Werkstatt2016)

wednesday  
27 July

	10am	11am	12am	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm
Keynote Mark Coniglio + Jenner performance											Alte Kantine	

Thursday  
28 July

Isadora 101: An Intensive Introduction (part 1/2)	Uferstudio 6											
Get Scripting: Empowering Isadora with Javascript	Seminar Room											
Introduction to Motion Tracking	Uferstudio 1											
Bang the FX: A Wild Technical Improv Session (part 1/3)	House of North											
Introduction to GLSL Shaders in Isadora	Uferstudio 1											
Bigger Data: Generative Design with Javacript	Seminar Room											
Introduction to Motion Tracking with the Xbox Kinect											Uferstudio 6	
Isadora Quick and Dirty											Alte Kantine	
Lake Studios Dance/Tech Residencies / Jaqueries + Phi											Uferstudio 1	

Friday  
29 July

Isadora 101: An Intensive Introduction (part 2/2)	Uferstudio 6											
IzzyMap: Projection Mapping with Isadora	Alte Kantine											
Averting Crisis: Creating Redundant Isadora Systems	Seminar Room											
Space and Video in Performance & Theatre (part 1/2)	Uferstudio 1											
Bang the FX: A Wild Technical Improv Session (part 2/3)	House of North											
Averting Crisis: Creating Redundant Isadora Systems	Seminar Room											
Get Scripting: Empowering Isadora with Javascript	Uferstudio 1											
Tracking the Body with Infrared Light											Uferstudio 6	
Introduction to Motion Tracking											Seminar Room	
Lake Studios Dance/Tech Residencies / Phi + Left I - Right I											Uferstudio 1	

Saturday  
30 July

Large Scale Projection Mapping: Concept to Realization	Uferstudio 6											
Space and Video in Performance and Theatre (part 2/2)	Uferstudio 1											
Introduction to GLSL Shaders in Isadora	Seminar Room											
Bang the FX: A Wild Technical Improv Session (part 3/3)	House of North											
Augmented Reality in Performance	Seminar Room											
Augmented Reality in Performance											Seminar Room	
Introduction to Motion Tracking with the Xbox Kinect	Uferstudio 6											
Getting Started with IzzyMap	Uferstudio 12											
IzzyMap: Projection Mapping with Isadora											Uferstudio 12	
Tracking the Body with Infrared Light											Uferstudio 6	
Left I - Right I + Live video set by Lillevan + BANG THE EFFECTS											Uferstudio 1	

10am 11am 12am 1pm 2pm 3pm 4pm 5pm 6pm 7pm 8pm 9pm

## Wednesday EVENING, 27 July 2016

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• **MARK CONIGLIO**

• *Keynote*

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• **JENNER**

• *a live cinema performance with*

• **Alessandro Massobrio** and **Valentina Besegher**

SPACE

**Alte Kantine**

TIME

**7:00pm**

DESCRIPTION

Jenner is an ongoing live cinema performance informed by archival research, super 8 film footage, photography, scratch and dust, voice recordings, noise guitar and space echo. A process that was born out of the necessity of finding a new form of contact with our own familiar history after a loss and developed by deconstructing the hidden links between a personal past and the sociopolitical environment at the beginning of consumer society.

Length: 35 min. Format: original format > super8, photography, found footage; Screening format > two channel video 1280 x 720 Sound: electric guitar and live electronics, voice recordings

Produced by Valentina Besegher and Alessandro Massobrio Co-Produced by Labor Neunzehn (2008 - 2016)

**Thursday, 28 July 2016**



## **ISADORA 101: AN INTENSIVE INTRODUCTION FOR NEW USERS**

*Part 1 of 2 day workshop*

**TEACHER** **Montgomery C Martin**

**ASSISTANT**

**TEACHER** **Jacques Hoepffner**

**PARTICIPANTS** **20**

**LANGUAGE** **English**

**SPACE** **Uferstudio 6**

**TIME** **10:00am - 5:00pm**

**LEVEL** No prior experience with Isadora is necessary. This workshop is open to participants of all experience levels, though preference will be given to beginners.

**DESCRIPTION** This workshop will introduce the basic setup, functionality, and operation of Isadora and its associated tools, while simultaneously leading participants to investigate the dramaturgical considerations one must make when bringing digital assets, scenic elements, and live performers together. During the workshop, participants will work together to create a “prototype” Isadora control patch that can be used improvisationally to quickly manipulate, and create interactive media for future projects.

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac).

**Thursday, 28 July 2016**



## **GET SCRIPTING: EMPOWERING ISADORA WITH JAVASCRIPT**

*also offered on Friday, July 29th at 2pm*

**TEACHER** Ryan Webber  
**PARTICIPANTS** 15  
**LANGUAGE** English  
**SPACE** Seminar Room  
**TIME** 10:00am - 1:00pm

**LEVEL** Beginner to Intermediate

**DESCRIPTION** Isadora's Javascript actor offers powerful new ways to utilize Isadora, especially when it comes to interactive control. This workshop, designed for non-coders, will help you to explore those possibilities, showing how you can create reusable scripts to animate objects, add interactivity, and incorporate numeric patterns (for example a Fibonacci sequence) into a generative design, where an algorithm is used to create or manipulate imagery.

Participants should have completed the online tutorial "Getting Started With Javascript" prior to attending this workshop:  
<http://troikatronix.com/support/kb/getting-started-with-javascript/>

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac).

**Thursday, 28 July 2016**



## **INTRODUCTION TO MOTION TRACKING**

*also offered on Friday, July 29th at 5pm*

**TEACHER** Jacques Hoepffner  
**PARTICIPANTS** 12  
**LANGUAGE** English  
**SPACE** Uferstudio 1  
**TIME** 10:00am - 12:00pm

**LEVEL** Beginner

**DESCRIPTION** In this hands-on workshop you will learn how to track objects and people using a live video feed together with Isadora's built-in modules, and then how to use the resulting values to interactively modulate video and audio. You'll start with a simple setup that measures the amount of movement in the frame, and then expand this knowledge as you learn to track independent points using the Eyes++ module.

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac).

**Thursday, 28 July 2016**



## **BANG THE FX: A WILD TECHNICAL IMPROV SESSION AT THE ISADORA WERKSTATT**

*Part 1 of 3 day workshop*

**TEACHER** **Fubbi Karlson**  
**PARTICIPANTS** **6**  
**LANGUAGE** **English**  
**SPACE** **House of North**  
**TIME** **11:00am - 4:00pm**

**DESCRIPTION** With almost no time to prepare, you've been asked to mix and match a venue's technology to make something super spectacular, and you have to do it with a budget that's just slightly more than zero. Does this sound familiar and a little terrifying? At the Isadora Werkstatt, it will be an improvisational dream come true!

This workshop is an exercise in what the great Seth Kirby from the Joshua Light Show called BANG THE EFFECTS – rhythmically controlling a wide variety of light producing gear. With a fearless attitude towards technology and an improvisational team approach you'll build effects and control systems from the gear you have at hand, and then follow your inner rhythm as you bang those effects really hard!

Over three days, master effects banger Fubbi Karlsson will share his knowledge and expertise as you learn to interface Isadora with gear like high density LED strips, video projectors, strobes and lights, Arduinos and relays, fluorescent tubes, DMX interfaces, and/or lasers. These materials will be our guide as we add MIDI controllers to create a "quick and dirty" performance tool in Isadora. At the party on the last day of the Werkstatt, you'll show the result of your efforts, and BANG THE EFFECTS for the entire Isadora community to see.

**APPLICATION PROCEDURE** Participation in this workshop is extremely limited. The perfect team member must be ready to work hard and share the glory with the other participants. To be considered, you must write a short application that includes the following information: 2 to 3 sentences about why you want to take this workshop, 2 to 3 sentences that let us know why you're the perfect person to take part, and a short statement indicating your commitment to finishing this project during the Werkstatt. We will inform accepted participants by June 15th, 2016. Send your application to: [werkstatt@troikatronix.com](mailto:werkstatt@troikatronix.com) with the subject line "Bang the FX".

**Thursday, 28 July 2016**

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• **INTRODUCTION TO GLSL SHADERS IN ISADORA**

• *also offered on July 30th at 10am with Mark Coniglio*

TEACHER **Mark Coniglio**  
PARTICIPANTS **50**  
LANGUAGE **English**  
SPACE **Uferstudio 1**  
TIME **1:00pm - 3:30pm**

LEVEL Intermediate to Advanced. Participants should be proficient with the core features of Isadora.  
All levels are welcome to attend.

DESCRIPTION The next release of Isadora, which will be available prior to this lecture, offers the possibility to compile and run OpenGL Shader Language (GLSL) programs that run on your computer's graphics card. This new feature opens the door to entirely new artistic possibilities for high-resolution, real-time image processing and generation. While GLSL is a "real" programming language like C or Javascript, you do not have to be a coder to benefit from this workshop. After showing you where to find GLSL programs on the web, we'll show you how to use them by simply pasting the code into Isadora. Then, we'll demonstrate how even non-coders like you can modify the source code so that you can manipulate and modulate images in response to real-time input.

REQUIREMENTS Participants are invited to bring their laptops so that they can follow along and try the examples on their own computer.

**Thursday, 28 July 2016**



## **BIGGER DATA: GENERATIVE DESIGN WITH JAVACRIPT**

**TEACHER** Ryan Webber  
**PARTICIPANTS** 15  
**LANGUAGE** English  
**SPACE** Seminar Room  
**TIME** 2:00pm - 5:00pm

**LEVEL** Intermediate to Advanced

**DESCRIPTION** The focus of this workshop is on using Javascript to create “generative designs” in Isadora. Systems in which the output: image, sound, or animation, is generated by a set of rules, by datasets, or an algorithm. Participants will learn to use Javascript in tandem with JSON\* and Isadora’s TCP-IP actors. You’ll learn how to use external Javascript libraries to collect formatted data sets from the Internet, and how to turn that data into organic, generative designs. Finally, you’ll leverage the knowledge gained above to analyze and collect data about video imagery and to use the result to further enhance the output of the generative system.

If you are an intermediate user of Javascript, we strongly encourage you to also attend the “Get Scripting: Empowering Isadora with Javascript” workshop earlier in the day.

(\*JavaScript Object Notation (JSON) is a minimal, human readable format for structuring data used on the Internet.)

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac).

**Thursday, 28 July 2016**



## **INTRODUCTION TO MOTION TRACKING WITH THE XBOX KINECT**

*also offered on Saturday, July 30th at 2pm*

**TEACHER** Mark Coniglio  
**PARTICIPANTS** 18  
**LANGUAGE** English  
**SPACE** Uferstudio 6  
**TIME** 5:00pm - 7:30pm

**LEVEL** Intermediate to Advanced. Participants should be proficient with the core features of Isadora, and comfortable working with peripheral hardware and software. Experience working with OSC data in Isadora is an asset, but not required.

**DESCRIPTION** In this hands-on workshop, participants will learn how to “hack” an Xbox 360 Motion Sensor to bring the depth map image and the body tracking data into Isadora, and to use that data to manipulate and modulate media in real-time. Be prepared to get on your feet as we explore the dramaturgy of motion tracking in digital performance.

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac) and their own Xbox Kinect 360 camera. (either the 1414 or 1473 model). Participants should be comfortable working in pairs, and “performing” for the Kinect.

**Thursday, 28 July 2016**



## **ISADORA QUICK AND DIRTY**

**MODERATOR** Michel Weber  
**PRESENTERS** Members of the Isadora Community (see description)  
**PARTICIPANTS** 50  
**LANGUAGE** English  
**SPACE** Alte Kantine  
**TIME** 5:00pm - 6:30pm

**LEVEL** Any

**DESCRIPTION** Have a favorite tip, trick or hack of Isadora? You will have 5 short minutes to present it to the Isadora community and esteemed judges. Come ready to rumble! Competition will be fierce for the first ever Izzy Award. Audience members and participants all welcome!

Judges to be announced.

## Thursday EVENING, 28 July 2016

SPACE      **Uferstudio 1**  
TIME        **7:30pm**

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- **JAQUERIES (excerpts)**
- **LAKE STUDIOS DANCE/TECH RESIDENCY**
- *by **Jacob Niedzwiecki** (choreographer/director)*

**DESCRIPTION**      Jacqueries is an immersive, participatory dance/theatre work inspired by parkour, escape rooms, and media technology. It explores themes of conspiracy, surveillance, identity, and security. The Toronto Star said “it’s almost like being in your own video game, except it’s real... Jacqueries is dance and theatre turned inside out and upside down.”we explore the dramaturgy of motion tracking in digital performance.

**CAST**                **Luke Garwood, Léa Lavoie-Gauthier, Jacob Niedzwiecki, Mateo Galindo Torres**

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- **PHI BY STRATOFYZIKA, INTERMEDIA PERFORMANCE COLLECTIVE**
- **LAKE STUDIOS DANCE/TECH RESIDENCY**
- *also shown on Friday July 29 at 8:00pm in Uferstudio 1*

**DESCRIPTION**       $\Phi$  is the latest audio/visual/interactive dance performance installation created by the Berlin-based collective, StratoFyzika in collaboration with the Lisbon-based choreographer, Daria Kaufman. Inspired by the slowly changing, repetitive structure of minimalist music, two dancers phase in and out of unison using loops and variations of choreographies from specific body parts. Using interactive sensors to track and respond to their movements, a light motion system alternately reveals and obscures their bodies while a spatial sound pool creates overlapping, electronic soundscapes. The result is a striking, visceral performance that challenges audience perceptions of the body, space and time.

**CAST**                Choreography / Movement: **Hen Lovely Bird, Daria Kaufman** | Light Design: **Alessandra Leone**  
Sound Design: **Lenka Kocisova** | Creative Coding: **Thomas VanTa, Maximilian Weber**

**Friday, 29 July 2016**



**ISADORA 101: AN INTENSIVE INTRODUCTION FOR NEW USERS**

*Part 2 of 2 day workshop*

**TEACHER**      **Montgomery C Martin**  
**ASSISTANT**    **Jacques Hoepffner**  
**TEACHER**      **Montgomery C Martin**  
**PARTICIPANTS** **20**  
**LANGUAGE**     **English**  
**SPACE**         **Uferstudio 6**  
**TIME**            **10:00am - 5:00pm**

**INFO**            Introductory workshop for new users. For more information please see Part 1 on Thursday, July 28.

**Friday, 29 July 2016**



**IZZYMAP: PROJECTION MAPPING WITH ISADORA**

*also offered on Saturday, July 30th at 4pm*

**TEACHER** Dan Shorten  
**ASSISTANT**  
**TEACHER** Ryan Webber  
**PARTICIPANTS** 18  
**LANGUAGE** English  
**SPACE** Alte Kantine  
**TIME** 10:00am - 1:00pm

**LEVEL** Intermediate. Participants should be comfortable with the core features of Isadora.

**DESCRIPTION** In this workshop you will learn how to use IzzyMap, Isadora's projection mapping tool, to "wrap" video imagery around bodies and objects in space, and how you can make those mappings respond to real-time input. You will also receive an overview of the core considerations one must make when using projection mapping in your designs. As a companion to this workshop, we also suggest attending "Large Scale Projection Mapping: from Concept to Realization.")

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac).

**Friday, 29 July 2016**

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**AVERTING CRISIS: CREATING REDUNDANT ISADORA SYSTEMS**

*also offered on Friday, July 29th at 2pm*

**TEACHER** Michel Weber  
**PARTICIPANTS** 12  
**LANGUAGE** English  
**SPACE** Seminar Room  
**TIME** 10:00am - 1:00pm

**LEVEL** Intermediate, Advanced

**DESCRIPTION** No computer or software - no matter how expensive or well coded - is immune to the occasional crash. You will learn how to setup your computer and Isadora to minimize or even eliminate the down time during a show. All automated. If the crash happens you can watch how Isadora re-starts, jumps to the same scene as it was before the crash and playing the movie from exactly where it stopped 5-10 seconds after the disaster occurred. The timing depends on your computer and the patch.

If you have two computers and a switcher/scaler with a serial port you can reduce the downtime to a few frames. You will learn how to create an automated system in which the outage is so short - only a few frames - that the average audience member would likely never even notice it.

Participants will learn how to take advantage of control and data actors such as Data Array, Comparator, Calculator, Send Serial Data, and more, to enable this redundant setup.

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac). Please install the "crash Isadora" actor

**Friday, 29 July 2016**

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• **SPACE AND VIDEO IN PERFORMANCE AND THEATRE**

• *Part 1 of 2 day workshop*

**TEACHER** Benjamin Krieg and Philine Rinnert  
**PARTICIPANTS** 16  
**LANGUAGE** English (wir sind offen für Rückfragen und Erklärungen auf deutsch)  
**SPACE** Uferstudio 1  
**TIME** 10:00am - 2:00pm

**LEVEL** Artistic basics workshop for stage designers, video artists, directors and anyone else who's interested. Basic knowledge of Isadora is helpful, but not required for participation.

**DESCRIPTION** Video is a frequently used medium in theatre and performance - live or pre-produced, as a device to create illusions, enlarge images or as a means of communicating information journalistically, to connect physically separated spaces simultaneously or simply as a structure that interacts with the real architecture. Based on their work with space and images, stage designer Philine Rinnert and video artist Benjamin Krieg will outline the different possibilities for using video imagery on the stage and, together with the workshop participants, in model settings will investigate the effects space and video images have on each other in performance and theatre.

**Friday, 29 July 2016**



**BANG THE FX: A WILD TECHNICAL IMPROV SESSION AT THE ISADORA WERKSTATT**

*Part 2 of 3 day workshop*

**TEACHER** Fubbi Karlson  
**PARTICIPANTS** 6  
**LANGUAGE** English  
**SPACE** House of North  
**TIME** 11:00am - 4:00pm

**INFO** Over three days, master effects banger Fubbi Karlsson will share his knowledge and expertise as as you learn to interface Isadora with a variety of gear in preparation for the closing night BANG THE FX bash. For a full description please see Part 1 on Thursday, July 28th.

**Friday, 29 July 2016**

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**• AVERTING CRISIS: CREATING REDUNDANT ISADORA SYSTEMS**

• *also offered on Friday, July 29th at 10am*

TEACHER **Michel Weber**  
PARTICIPANTS **15**  
LANGUAGE **English**  
SPACE **Seminar Room**  
TIME **2:00pm - 5:00pm**

LEVEL Intermediate, Advanced

DESCRIPTION No computer or software - no matter how expensive or well coded - is immune to the occasional crash. You will learn how to setup your computer and Isadora to minimize or even eliminate the down time during a show. All automated. If the crash happens you can watch how Isadora re-starts, jumps to the same scene as it was before the crash and playing the movie from exactly where it stopped 5-10 seconds after the disaster occurred. The timing depends on your computer and the patch.

If you have two computers and a switcher/scaler with a serial port you can reduce the downtime to a few frames. You will learn how to create an automated system in which the outage is so short - only a few frames - that the average audience member would likely never even notice it.

Participants will learn how to take advantage of control and data actors such as Data Array, Comparator, Calculator, Send Serial Data, and more, to enable this redundant setup.

REQUIREMENTS Each participant must provide their own laptop computer (PC or Mac). Please install the "crash Isadora" actor

**Friday, 29 July 2016**

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**GET SCRIPTING: EMPOWERING ISADORA WITH JAVASCRIPT**

*also offered on Thursday, July 28th at 10am*

**TEACHER** Ryan Webber  
**PARTICIPANTS** 15  
**LANGUAGE** English  
**SPACE** Uferstudio 1  
**TIME** 2:00pm - 5:00pm

**LEVEL** Beginner or Intermediate

**DESCRIPTION** Isadora's Javascript actor offers powerful new ways to utilize Isadora, especially when it comes to interactive control. This workshop, designed for non-coders, will help you to explore those possibilities, showing how you can create reusable scripts to animate objects, add interactivity, and incorporate numeric patterns (for example a Fibonacci sequence) into a generative design, where an algorithm is used to create or manipulate imagery. Participants should have completed the online tutorial "Getting Started With Javascript" prior to attending this workshop: <http://troikatronix.com/support/kb/getting-started-with-javascript/>

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac). Please install the "crash Isadora" actor

**Friday, 29 July 2016**

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• **TRACKING THE BODY WITH INFRARED LIGHT**

• *also offered on Saturday, July 30th at 5pm with Mark Coniglio*

TEACHER **Mark Coniglio**  
PARTICIPANTS **50**  
LANGUAGE **English**  
SPACE **Uferstudio 6**  
TIME **5:00pm - 7:00pm**

LEVEL Beginner to Advanced. All levels are welcome to attend.

DESCRIPTION One of the most frequently used techniques for combining performers and interactive visuals requires tracking the performers in a field of infrared light – light that is invisible to the human eye, but visible to infrared sensitive cameras. In this presentation, Isadora’s creator Mark Coniglio will reveal the opportunities and pitfalls of this technique, showing how to create large infrared fields inexpensively, what kinds of cameras and filters are needed to see this “invisible” light, and how to use the moving body as a source of real-time interaction in Isadora. The workshop will be held in a dance studio with all the necessary resources so that you will see how the entire process works in a real-world situation.

REQUIREMENTS None

**Friday, 29 July 2016**



**INTRODUCTION TO MOTION TRACKING**

*also offered on Thursday, July 28th at 10am*

**TEACHER** Jacques Hoepffner  
**PARTICIPANTS** 15  
**LANGUAGE** English  
**SPACE** Seminar Room  
**TIME** 5:00pm - 7:00pm

**LEVEL** Beginner

**DESCRIPTION** In this hands-on workshop you will learn how to track objects and people using a live video feed together with Isadora's built-in modules, and then how to use the resulting values to interactively modulate video and audio. You'll start with a simple setup that measures the amount of movement in the frame, and then expand this knowledge as you learn to track independent points using the Eyes++ module.

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac).

## Friday EVENING, 29 July 2016

SPACE  
TIME

Uferstudio 1  
8:00pm

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### • **PHI BY STRATOFYZIKA, INTERMEDIA PERFORMANCE COLLECTIVE** • **LAKE STUDIOS DANCE/TECH RESIDENCY**

• *also shown on Thursday, July 28th at 7:30pm*

#### DESCRIPTION

Φ is the latest audio/visual/interactive dance performance installation created by the Berlin-based collective, StratoFyzika in collaboration with the Lisbon-based choreographer, Daria Kaufman. Inspired by the slowly changing, repetitive structure of minimalist music, two dancers phase in and out of unison using loops and variations of choreographies from specific body parts. Using interactive sensors to track and respond to their movements, a light motion system alternately reveals and obscures their bodies while a spatial sound pool creates overlapping, electronic soundscapes. The result is a striking, visceral performance that challenges audience perceptions of the body, space and time.

#### CREDITS

Choreography / Movement: **Hen Lovely Bird, Daria Kaufman** | Light Design: **Alessandra Leone** | Sound Design: **Lenka Kocisova**  
Creative Coding: **Thomas VanTa, Maximilian Weber**

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### • **LEFT I - RIGHT I**

• *also shown on Saturday, July 30th at 8pm*

#### DESCRIPTION

Left I - Right I is a film and performance developed from the different perspectives of the brain's left and right hemispheres. The film (shot in the style of a selfie) shows the daily life of a young woman (Nadja Bobyleva). The performance that follows shows her reality split in two halves: the left side presents the analytical, self-conscious half - constantly busy with form, the past and the future, whereas the right side always finds itself in the experience of the "now" - following sensations, feelings, emotions and instinct. The performance presents the extreme embodiment of this split reality. Together the two halves make up a holistic experience. Through this performance we would like to encourage the audience to reflect on the relationship between their own "two halves".

#### CREDITS

Creation, Concept, and Film: **Marcela Giesche and Sonya Levin** | Performance: **Marcela Giesche and Sonya Levin** | Film Actress: **Nadja Bobyleva** | Sound Design: **Johannes Einfalt** | Produced in 2014 with the support of Lake Studios Berlin, and DOCK 11 Berlin.

**Saturday, 30 July 2016**



## **LARGE SCALE PROJECTION MAPPING: FROM CONCEPT TO REALIZATION**

**TEACHER** Dan Shorten  
**PARTICIPANTS** 50  
**LANGUAGE** English  
**SPACE** Uferstudio 6  
**TIME** 10:00am - 2:00pm

**LEVEL** All

**DESCRIPTION** Dan Shorten will give an overview of the workflow involved in preparing video content for large-scale video mapping projects using Isadora as the point of delivery tool. There will be a summation of the key elements one must be aware of when starting a project, the various stages of activity required to realize the design, and an overview of of key software packages used throughout the creative process that will ensure on-time delivery. The lecture will cover how to plan, produce and deliver visuals in response to a real world, three-dimensional object of any scale. The lecture will conclude with a question and answer period to address participant's specific queries.

**Saturday, 30 July 2016**

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## **SPACE AND VIDEO IN PERFORMANCE AND THEATRE**

*Part 2 of 2 day workshop*

**TEACHER** Benjamin Krieg and Philine Rinnert  
**PARTICIPANTS** 16  
**LANGUAGE** English (wir sind offen für Rückfragen und Erklärungen auf deutsch)  
**SPACE** Uferstudio 1  
**TIME** 10:00am - 2:00pm

**INFO** In model settings we will investigate the effects space and video imagery have on each other in performance and theatre. Basic knowledge of Isadora is helpful, but not required for participation. For a fuller description please see Part 1 on Friday, July 29th.

**Saturday, 30 July 2016**

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• **INTRODUCTION TO GLSL SHADERS IN ISADORA**

• *also offered on Thursday, July 28th, at 1pm with Mark Coniglio*

TEACHER **Mark Coniglio**  
PARTICIPANTS **15**  
LANGUAGE **English**  
SPACE **Seminar Room**  
TIME **10:00am - 12:30pm**

LEVEL Intermediate to Advanced. Participants should be proficient with the core features of Isadora. However, because this workshop is given in a lecture format, all levels are welcome to attend.

DESCRIPTION The next release of Isadora, which will be available prior to this workshop, offers the possibility to compile and run OpenGL Shader Language (GLSL) programs that run on your computer's graphics card. This new feature opens the door to entirely new artistic possibilities for high-resolution, real-time image processing and generation. While GLSL is a "real" programming language like C or Javascript, you do not have to be a coder to benefit from this workshop. After showing you where to find GLSL programs on the web, we'll show you how to use them by simply pasting the code into Isadora. Then, we'll demonstrate how even non-coders like you can modify the source code so that you can manipulate and modulate images in response to real-time input.

REQUIREMENTS Participants are invited to bring their laptops so that they can follow along and try the examples on their own computer.

**Saturday, 30 July 2016**



**BANG THE FX: A WILD TECHNICAL IMPROV SESSION AT THE ISADORA WERKSTATT**

*Part 3 of 3 day workshop*

**TEACHER** Fubbi Karlson  
**PARTICIPANTS** 6  
**LANGUAGE** English  
**SPACE** House of North  
**TIME** 11:00am - 4:00pm

**INFO** Over three days, master effects banger Fubbi Karlsson will share his knowledge and expertise as as you learn to interface Isadora with a variety of gear in preparation for the closing night BANG THE FX bash. For a full description please see Part 1 on Thursday, July 28th.

**Saturday, 30 July 2016**



## **AUGMENTED REALITY IN PERFORMANCE**

**TEACHER** **Jacob Niedzwiecki**  
**PARTICIPANTS** **10**  
**LANGUAGE** **English**  
**SPACE** **Seminar Room**  
**TIME** **2:00pm - 4:00pm**

**LEVEL** All are welcome! We will adapt the level based on who comes.

**DESCRIPTION** In this workshop, the Jacqueries team will share some of the processes and tools we use to create immersive, transmedia performance works. This is a mix of creative and technical discussion: participants will explore code frameworks like Cohort (which allows for synchronized sound & video playback across many smartphones), DepthKit (3D capture), and Vuforia (augmented reality), and also discuss creative strategies for designing audience experiences.

**REQUIREMENTS** If you can, please bring a laptop, smartphone or tablet, and headphones. (Apple devices preferred)

If you can't, and you are interested in this workshop, we want you to come! It is not purely technical, and we don't want to turn people away based on what technology they own.

**Saturday, 30 July 2016**



## **GETTING STARTED WITH IZZYMAP**

**TEACHER**      **Montgomery C Martin**  
**PARTICIPANTS**      **15**  
**LANGUAGE**      **English**  
**SPACE**      **Uferstudio 12**  
**TIME**      **2:00pm - 4:00pm**

**LEVEL**      All are welcome!

**Saturday, 30 July 2016**



## **INTRODUCTION TO MOTION TRACKING WITH THE XBOX KINECT**

*Also offered on Thursday, July 28th at 5pm with Mark Coniglio*

**TEACHER** Mark Coniglio  
**PARTICIPANTS** 18  
**LANGUAGE** English  
**SPACE** Uferstudio 6  
**TIME** 2:00pm - 4:30pm

**LEVEL** Intermediate to Advanced. Participants should be proficient with the core features of Isadora, and comfortable working with peripheral hardware and software. Experience working with OSC data in Isadora is an asset, but not required.

**DESCRIPTION** In this hands-on workshop, participants will learn how to “hack” an Xbox 360 Motion Sensor to bring the depth map image and the body tracking data into Isadora, and to use that data to manipulate and modulate media in real-time. Be prepared to get on your feet as we explore the dramaturgy of motion tracking in digital performance.

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac) and their own Xbox Kinect 360 camera. (either the 1414 or 1473 model). Participants should be comfortable working in pairs, and “performing” for the Kinect.

**Saturday, 30 July 2016**



**IZZYMAP: PROJECTION MAPPING WITH ISADORA**

*also offered on Friday, July 29th, at 10am*

**TEACHER** Dan Shorten  
**ASSISTANT**  
**TEACHER** Michel Weber  
**PARTICIPANTS** 15  
**LANGUAGE** English  
**SPACE** Seminar Room  
**TIME** 4:00pm - 7:00pm

**LEVEL** Intermediate. Participants should be comfortable with the core features of Isadora.

**DESCRIPTION** In this workshop you will learn how to use IzzyMap, Isadora's projection mapping tool, to "wrap" video imagery around bodies and objects in space, and how you can make those mappings respond to real-time input. You will also receive an overview of the core considerations one must make when using projection mapping in your designs. As a companion to this workshop, we also suggest attending "Large Scale Projection Mapping: from Concept to Realization.")

**REQUIREMENTS** Each participant must provide their own laptop computer (PC or Mac).

**Saturday, 30 July 2016**

LEC  
TURE

• **TRACKING THE BODY WITH INFRARED LIGHT**

• *also offered on Friday, July 29th, at 5pm with Mark Coniglio*

TEACHER **Mark Coniglio**  
PARTICIPANTS **50**  
LANGUAGE **English**  
SPACE **Uferstudio 6**  
TIME **5:00pm - 7:00pm**

LEVEL Beginner to Advanced. All levels are welcome to attend.

DESCRIPTION One of the most frequently used techniques for combining performers and interactive visuals requires tracking the performers in a field of infrared light – light that is invisible to the human eye, but visible to infrared sensitive cameras. In this presentation, Isadora’s creator Mark Coniglio will reveal the opportunities and pitfalls of this technique, showing how to create large infrared fields inexpensively, what kinds of cameras and filters are needed to see this “invisible” light, and how to use the moving body as a source of real-time interaction in Isadora. The workshop will be held in a dance studio with all the necessary resources so that you will see how the entire process works in a real-world situation.

REQUIREMENTS None

**Saturday, 30 July 2016**

LEC  
TURE

• **AUGMENTED REALITY IN PERFORMANCE**

**TEACHER** **Jacob Niedzwiecki**  
**PARTICIPANTS** **10**  
**LANGUAGE** **English**  
**SPACE** **Seminar Room**  
**TIME** **5:00pm - 7:00pm**

**LEVEL** All are welcome! We will adapt the level based on who comes.

**DESCRIPTION** In this workshop, the Jacqueries team will share some of the processes and tools we use to create immersive, transmedia performance works. This is a mix of creative and technical discussion: participants will explore code frameworks like Cohort (which allows for synchronized sound & video playback across many smartphones), DepthKit (3D capture), and Vuforia (augmented reality), and also discuss creative strategies for designing audience experiences.

**REQUIREMENTS** If you can, please bring a laptop, smartphone or tablet, and headphones. (Apple devices preferred) If you can't, and you are interested in this workshop, we want you to come! It is not purely technical, and we don't want to turn people away based on what technology they own.

## Saturday EVENING, 30 July 2016

SPACE  
TIME

Uferstudio 1  
8:00pm

PERF  
ORMA  
NCE

### LEFT I - RIGHT I

*also shown on Friday, July 29th at 8pm*

#### DESCRIPTION

Left I - Right I is a film and performance developed from the different perspectives of the brain's left and right hemispheres. The film (shot in the style of a selfie) shows the daily life of a young woman (Nadja Bobyleva). The performance that follows shows her reality split in two halves: the left side presents the analytical, self conscious half - constantly busy with form, the past and the future, whereas the right side always finds itself in the experience of the "now" - following sensations, feelings, emotions and instinct. The performance presents the extreme embodiment of this split reality. Together the two halves make up a holistic experience. Through this performance we would like to encourage the audience to reflect on the relationship between their own "two halves".

#### CREDITS

Creation, Concept, and Film: **Marcela Giesche and Sonya Levin** | Performance: **Marcela Giesche and Sonya Levin** | Film Actress: **Nadja Bobyleva** | Sound Design: **Johannes Einfalt** | Produced in 2014 with the support of Lake Studios Berlin, and DOCK 11 Berlin.

PERF  
ORMA  
NCE

### LIVE VIDEO SET BY LILLEVAN

PERF  
ORMA  
NCE

### BANG THE EFFECTS

#### DESCRIPTION

Participants from Fubbi Karlsons 3 day workshop BANG THE EFFECTS for the Isadora Werkstatt community. Come with your dancing shoes on!

## Biographies

**VALENTINA BESEGHER** is an avant-garde filmmaker, live video performer and visual artist. **ALESSANDRO MASSOBRIO** is a new music composer, electronic musician and guitarist.

They have collaborated since 2002. Their works have been screened and performed internationally including: OFFF Festival in Barcelona, Cafe Oto, European Media Art Festival in Osnabrück, Issue Project Room, C.A.R. Media Art Fair in Essen, Cartes Flux in Espoo Finland, Oslo Screen Festival, Mir Festival in Athens, Simultan Festival in Timisoara Romania and Gaudeamus Muziekweek. Valentina and Alessandro work and live in Berlin.

Composer and media artist **MARK CONIGLIO** is recognized as a pioneering force in the field of interactive performance. With Dawn Stoppiello, he co-founded the media intensive dance group Troika Ranch in 1994. As a result of this artistic practice, he created Isadora® – a software tool that provides deep interactive control over digital media. Isadora has become the tool of choice for thousands worldwide, including such notables as Francis Ford Coppola, The Wooster Group, and the Royal Shakespeare Company. Coniglio has received a “Bessie” award, a prize from Prix Ars Electronica, and the World Technology Award, which recognized his long-term legacy in art and technology.

**MARCELA GIESCHE** is a freelance artist currently based in Berlin, Germany. She holds a BFA/Diplom in dance and choreography from the Rotterdamse Dansacademie and The Ohio State University and has received numerous scholarships including participation in the danceweb 2010 at Impulstanz.

Marcela has danced for Bianca Van Dillen and Beppie Blankert in the Netherlands, with Neuer Tanz / VA Wölfl, Veronika Riz, and Thomas Ostermeier/Mikel Aristegui, in Germany, and for the Italian company Deja Donne (Simone Sandroni/Lenka Flory).

She has taught and presented her own work in the USA, Canada, Brazil, and across Europe and has been Artist in Residence at numerous Universities including Alfred University, Ohio State University, and Middlebury College. Marcela has created works in residence at Danswerkplaats Amsterdam, Dansateliers Rotterdam, OMI International Artist Collective – NYC, Mayday Dance festival – Antwerp, and at Schloss Broellin Germany. Her latest work left I - Right I (with Sonya Levin), Le Sacre du Printemps, exFolia, Selfportrait 24, Powercut (with Andy Moor) and Vertigo Project (with Siri Clinckspoor) were performed at DOCK 11, at Tanztage Berlin 2014, and the Sacre 100 Festival at HAU2.

She has worked for 3 years with Bruno Caverna as a teacher, and choreographer and has collaborated with Dutch designer Maria Blaise, guitarist Andy Moor (the Ex) in Amsterdam, and Sonya Levin in Berlin. She has also been developing her own research in dance technique based on walking and running principles as well as movement improvisation with strong focus on partnering, communication, musicality, and sensual spatial/material awareness, which she shares through workshops, and classes. Exploring the fertile crossing ground between dance on stage and movement in public spaces continues, to inform and inspire her creative work and life.

**JACQUES HOEPFFNER** is an artist based in Paris, using photography, video and digital media. He works for the stage, creating scenographies for dance and theater. He has developed a long collaboration with choreographer Cécile Proust, using images and sounds as documentation about feminism and political issues. He works regularly with Anne Collod, Rachid Ouramdane, Dominique Boivin, among others. He produces video installations based on research of human behavior and public spaces. Jacques has used Isadora since the beginning and currently develops bridges between Isadora and Unity 3D for real 3D mapping. Jacques teaches digital media at University (Paris 8 Saint-Denis, Paris X Nanterre), Art Schools and organizes Isadora professional training.

## Biographies

**FUBBI KARLSSON** works with arts and technology as a creator and translator of protocols, enabling complex productions to mix new technologies and conceptual design. He has been using Isadora from its inception to create media heavy shows from Shanghai to Vegas and to build interaction and complex playback in galleries all over the world. Recent work include designing the Miike Snow world tour, Peaches music videos and stage effects, a 4K green screen production for the artist Asta Gröting, a stage design for an opera using LED panels as architecture as well as custom electronics for stage and the arts. He recently cofounded the design studio House of North in Berlin, where this workshop will take place. Fubbi was born in Gothenburg in '75. He lives and works in Berlin and NY.

**BENJAMIN KRIEG**, was born in 1977 in Freiburg. Image creator, designer and technician in the areas of photography/video/film. He works both independently and in performance, dance, theatre and music with artists such as Heinz Emigholz, Anestis Azas and Prodromos Tsirikoris in Ballhaus Naunynstraße, with Thomas Ostermeier and Patrick Wengenroth at the Schaubühne, with Hanna Slak, Guillaume Cailleau and the Mahler Chamber Orchestra in Radialsystem, with Saar Magal and Amit Drori at Bavarian State Opera Munich, with Yael Ronen and Hakan Savaş Mican at the Maxim Gorki Theatre and with She She Pop and Damian Rebgetz at the HAU Berlin and the Kammerspiele in Munich. From 2006-10, he was a member of the Berlin group Oper Dynamo West. His work has been shown internationally at many festivals and exhibitions.

**LILLEVAN** is an animation, video and media artist. He is perhaps best known as founding member of the visual / music group Rechenzentrum (1997-2008). Lillevan has performed and collaborated with many artists from a wide array of genres, from opera to installation, from minimal electronic experimentalism to dance and classical music; performed and exhibited all over the globe, and at all the major media festivals

**MONTGOMERY C MARTIN** has worked professionally, independently, and academically designing digital assets and mobile technologies for the theatre and performance since 2005. Isadora has been the cornerstone of his academic and creative practice, and he is thrilled to be working on the TroikaTronix team. He is a PhD candidate at the Centre for Drama, Theatre and Performance Studies at the University of Toronto, where he is a founding member and current researcher with the Digital Dramaturgy Lab (DDL). There, he leads practice-based research projects investigating the application of motion tracking, telepresence, and augmented reality technologies in theatre and performance installation.

**JACOB NIEDZWIECKI** is a choreographer, filmmaker, and creative technologist whose work fuses movement, media, and code into inventive new forms. His immersive app-based performance Jacqueries won the Vanguard Prize for Risk and Innovation at the 2014 SummerWorks festival in Toronto, and has begun touring internationally with a 2015 US première in Miami. He directed and produced the National Ballet of Canada's four-hour segments for the 2014 and 2015 World Ballet Day livestream, which saw over 350,000 viewers. His short films have been shown at festivals around the world, including Dance on Camera and Cinedans.

**PHILINE RINNERT** studied Stage Design at the UdK Berlin and at the St. Petersburg Theatre Academy and works as a freelance stage and costume designer. She was involved in the founding of Oper Dynamo West in Berlin and since then has developed music theatre projects with Johannes Müller, which have been performed in such venues as the Sophiensaele Berlin, Radialsystem, Kampnagel Hamburg and at the Bavarian State Opera. Along with various direc-

## Biographies

tors, she regularly works with the choreographer Colette Sadler and the performance collective Freundliche Mitte in Vienna. Her work has been seen at the international Theatre Festival in Athens, at the Nowy Teatr Warsaw, at the Bavarian State Opera Munich, at the Steirische Herbst in Graz, at the Southbank Centre London and the Tramway Glasgow, among others. Apart from her theatre work, she also creates site-specific interventions and installations.

**DAN SHORTEN** BA (Hons) Theatre Acting, PG (Dip) Performance Studies, MA Digital Performance. Dan is a multi-award-winning director, designer and audio-visual specialist working with various companies from all over the UK. He has worked on shows, projects and events, which have toured across the UK and overseas. He is the Artistic Director of Anomic Multimedia and creative consultant for Blackpool Illuminations. He has worked as a visiting designer for Sadler's Wells Associate Artist Jasmin Vardimon and with The Barbican's associate artists Boy Blue Ent. He has presented work at the Barbican Centre, LUX Helsinki, BIPAF Busan, South Korea, TCCFE London and at CSU California. Dan produces regular Video Mapping installations at Festivals such as LUX (Helsinki), BIPAF (Busan), Troyfest (UK) and for Glastonbury Festival (UK). In March 2015 Anomic Multimedia presented Liquid?Metal at Glowfest in Ostuni in Italy and were selected from a group of international artists for the third prize. Dan has been involved in several large scale video mapping projects on iconic buildings and structures such as The Tower of London, The British Museum, Guildhall Yard and Blackpool Tower and he is currently developing a project with Tower Bridge. Dan has written a new BA (Hons) degree program for the world famous conservatoire The Guildhall School of Music and Drama and is currently writing an MA program for the same school.

**STRATOFYZIKA** is a Berlin based collective creating movement-based interactive audiovisual performances as well as dance for camera films, founded on the meeting of three personalities, three fields (sound, animated images and dance), and three cultural backgrounds. Each of the three artists/fields/backgrounds represents one "stratum" (Strato) of our complex perception: audio, visual and movement layers. They use the laws of physics (Fyzika) as a metaphorical way of explaining material states from the realms of imagination, emotions and spirit. A multi-layered process that echoes the cognitive processes of the mind and the way stories are collected through life as a tool of learning and orientation. Interactivity is used to design and research immersive relations between the virtual and physical world. For more information on their work please see: [www.stratofyzika.com](http://www.stratofyzika.com)

**RYAN WEBBER** has developed multimedia applications since the mid 90's. His first experiments in generative image creation and video mixing were developed in Director's Lingo script. This work led to developing online games in Shockwave and Flash, and then to the development of front and back-end websites for major broadcasters. His love of real-time video art continued thru his regular Vjing engagements at a number of Toronto electronic music events, where he developed a fashion label that he continues to design and market today. These experiences come together in his role as a member of the Troikatronix Team, where he has worked extensively in Isadora, both as a platform for live video performance, and as a framework for creating rich interactive and data driven installations.

**MICHEL WEBER:** Since the end of the 1990's Weber has worked with still and moving images. He began as a lighting operator and since 2004 as a video technician. Since 2008 he is leading the video department at the Theatre of the Arts, part of the Zurich University of the Arts, teaching courses in digital video technology. He is a Isadora betatester, forum-moderator and part of the Troikatronix Team. He regularly uses analog and digital signals and communication protocols such as RS232, DMX, MIDI, OSC as well as computer networks in his work.

## Locations & Tickets

UFERSTUDIOS	Uferstr. 8/23 Badstr. 41a 13357 Berlin
ALTE KANTINE WEDDING	Uferhallen Kulturwerkstatt Uferstrasse 8-11 13357 Berlin <a href="http://alte-kantine-wedding.de/">http://alte-kantine-wedding.de/</a>
HOUSE OF NORTH	Uferstr. 8-11 13357 Berlin <a href="http://north-berlin.com/">http://north-berlin.com/</a>
PUBLIC TRANSPORT	U8 Pankstraße U9 Nauener Platz / Osloerstr M27 Pankstr S-Bahn Gesundbrunnen / Humboldthain
ONE DAY PASS	100€
THREE DAY PASS	275€
THREE DAY PASS	225€ <b>EARLY BIRD</b> <i>available until June 12th</i>

*All prices include VAT*

Day passes include workshops, lectures + evening performances  
Individual tickets for evening performances will also be available.

**Tickets Sales start Thursday, May 19th, please check <http://www.troikatronix.com>**

TROIKATRONIX : ISADORA    Mark Coniglio : Uferstr. 8/23 : 13357 Berlin : Germany : <http://www.troikatronix.com>