

EyesWeb 2 / Delavnica / Workshop @ 15.00–17.30
Procesiranje live video signala v realnem času. /
Processing of video-camera images in real time.

11. JUNIJ

EyesWeb 3 / Delavnica / Workshop @ 10.30–12.30
Tehnike subtrakcije ozadja. / Techniques of background subtraction.

EyesWeb 4 / Delavnica / Workshop @ 15.00–17.30
Zaznavanje in sledenje primitivnih oblik; analiza izraznega giba. /
Tracking of blobs; expressive motion analysis.

15. JUNIJ

Miller Puckette, PhD / CRCA / USA / crca.ucsd.edu

Research work at the Center for Research in Computing and the Arts (CRCA) - at the University of California, San Diego (UCSD), USA
UCSD je že več kot 30 let prisotna na področju raziskovanja in produkcije elektronske glasbe. Danes so večinoma študentje gonilna sila razvoja novih glasbenih vmesnikov ter raziskovanja na področju akustike in prostorskega zvoka. / UCSD has been involved in computer music research and production for over 30 years. Today, activity is largely driven by students, who design new interactive musical instruments and do research in acoustics and spatial audio.

Puckette je končal doktorat iz matematike na univerzi Harvard. Do 1987 član MIT Media Lab-a. Kasneje deluje na IRCAM-u kjer razvije program Max/MSP. Trenutno je direktor CRCA v San Diegu, kjer je razvil odprtokodno programsko orodje Pure Data (PD). / Puckette obtained a PhD in Mathematics from Harvard. Member of MIT's Media Lab until 1987. Later, at IRCAM he wrote the Max/MSP program. He is now associate Director of the CRCA at UCSD in San Diego, where he developed the real-time open-source software Pure Data (PD).

16. JUNIJ

IOhannes Zmölning / IEM / PD-Graz / Austria / www.iem.at
Lukas Gruber / PD Graz / Austria / www.myspace.com/vjlux
Georg Holzmann / PD-Graz / Austria / pd-graz.mur.at

Pure Data – PD

Pure Data (PD) je odprto-kodno programsko orodje za generiranje in obdelavo avdija, grafike, videa ter s pomočjo senzorjev pridobljenih podatkov. / Pure Data (PD) is an Open Source software environment for real-time generation and processing of audio, graphics, video and sensor data.

Gruber je študiral telematiko na Tehnični Univerzi v Gradcu, kjer trenutno končuje doktorat na inštitutu za računalniško grafiko in vid. Kot vizualni umetnik nastopa po vsem svetu. / Gruber studied telematics at the Technical University Graz and is now working on his PhD at the Institute for Computer Graphics and Vision. Performing as a visual artist all over the world. / www.kanalattacke.org/lux

Holzmann je študiral zvočni inženiring na Inštitutu za elektronsko glasbo (IEM) v Gradcu. Končuje doktorat na Tehnični univerzi v Berlinu. Uporablja PD za performanse in nastopa po vsem svetu. / Holzmann studied sound engineering at the IEM Graz and is now working on his PhD at the Technical University Berlin. Performances all over the world using Pure data. / grh.mur.at

Zmölning je študiral zvočni inženiring na IEM v Gradcu, kjer tudi končuje doktorat. Je aktiven razvijalec PD-ja in ostalih odprtokodnih programov. Želi si nastopati po vsem svetu. / Zmölning studied sound engineering at the IEM Graz and is currently working on his PhD. He is an active developer of Pure Data and other Open Source software. He would like to perform all over the world. / umlaeute.mur.at

Pure Data (PD) 1 / Delavnica / Workshop @ 10.30–13.00
Uvod v PD: Instalacija PD-ja / General introduction to PD: Installation of PD

Pure Data (PD) 2 / Delavnica / Workshop @ 15.00–17.30
Glasi v avdio: Odprt Laboratorij / A loud introduction to audio: Open Worklab

IOhannes Zmölning / IEM / PD-Graz / Austria
Georg Holzmann / PD-Graz / Austria

Blind Date

Blind Date je avdio-vizualni performans, kjer performerji začnejo z belo podlago (prazen program) in počasi gradijo in spreminjajo algoritem, ki hkrati deluje v realnem času. / Blind Date is an audiovisual performance where the performers start with a blank canvas (i.e. an empty patch), and gradually build-up and modify a running program, in the tradition of Live Coding.

Delavnica / Workshop /
Jakopičeva galerija

Delavnici / Workshops /
Jakopičeva galerija

Predavanje / Lecture /
Galerija Kapelica @ 20.00

IRZU

GALERIJA KAPELICA

Delavnici / Workshops /
Jakopičeva galerija
@ Termini delavnic so navedeni zraven opisov / Workshop times are listed next to their description

IRZU

MoTA

Performans / Performance /
Jakopičeva galerija @ 20.00

IRZU

MoTA

17. JUNIJ

Pure Data (PD) 3 / Delavnica / Workshop @ 10.30–13.00
Več osnov PD-ja: Vizualije v PD-ju: GEM /
More basics in PD: Doing visuals in PD: GEM

Pure Data (PD) 4 / Delavnica / Workshop @ 15.00–17.30
Odprt Laboratorij / Open Worklab

Miller Puckette / USA / Kitara, elektronika / Guitar, Live electronics

Iz zvoka je možno izluščiti določene parametre ter jih uporabljati za manipulacijo drugih zvočnih parametrov. Z informacijo o fazi in amplitudi kitarskih strun bodo tako v realnem času krmiljeni klasični algoritmi za sintezo zvoka. / Sound, can be used as a source of control for musical parameters. The strings of a guitar directly provide phase and amplitude information that will be used to drive classical synthesizer algorithms.

Mats Lindström / EMS / Sweden / www.ems.rikskonserter.se
Anna Koch / WELD / Sweden / www.weld.se

One / Scratch Memory (2009)

One se nanaša na legendarno skladbo Fluorescent Sound Davida Tudorja, ki je bila izvedena leta 1964 z neonskimi lučmi. / One is a reference to David Tudor's legendary piece Fluorescent Sound performed on fluorescent light banks in 1964.

Scratch Memory se ukvarja z reciklažo gibalnega materiala in preizprašuje njegove izvorne vrednosti. / Scratch memory is about rediscovering and recycling body movements and questioning their original value.

Koch je plesalka in koreografinja. Od 2006 umetniška direktorica eksperimentalne platforme Weld v Stockholmu. / Koch is a dancer and choreographer. Since 2006 she is the artistic director of the experimental platform Weld in Stockholm.

Lindström je skladatelj in elektronski glasbenik. Od 2004 je umetniški vodja Švedskega inštituta za elektroakustično glasbo EMS. / Lindström is a composer and a musician, working with live-electronics. Since 2004 he is the artistic director of the Institute for Electroacoustic Music in Sweden EMS.

18. JUNIJ

Pure Data (PD) 5 / Delavnica / Workshop @ 10.30–13.00
Izbirne vsebine: Mreženje s PD-jem (netpd) /
Audience topics: Networking with PD (netpd)

Pure Data (PD) 6 / Delavnica / Workshop @ 15.00–17.30
Odprt Laboratorij / Open Worklab

Mats Lindström / EMS / Sweden
Anna Koch / WELD / Sweden

Koncepti za deli One in Scratch Memory /
The concepts behind One and Scratch Memory

Delavnici / Workshops /
Jakopičeva galerija

Performans / Performance /
Galerija Kapelica @ 20.00

IRZU

GALERIJA KAPELICA

Performans / Performance /
Mestni muzej @ 22.00

KAPA

IRZU

Delavnici / Workshops /
Jakopičeva galerija

Predavanje / Lecture /
Galerija ŠKUC @ 18.00

IRZU

IRZU



IRZU

INŠTITUT ZA RAZISKOVANJE ZVOČNIH UMETNOSTI
INSTITUTE FOR SONIC ARTS RESEARCH

Inštitut za Raziskovanje Zvočnih Umetnosti (IRZU) je mlada nevladna organizacija, ki temelji na interdisciplinarnem konceptu. V okviru svojih dejavnosti prepleta tri glavne komponente, in sicer izobraževanje, umetniško produkcijo ter raziskovalne dejavnosti na področju avdio tehnologij.

Festival zvočnih umetnosti Ear-Zoom je eden izmed prvih večjih projektov inštituta. Kot osrednji akterji bodo predstavljeni uveljavljeni inštituti iz evropskega prostora in ZDA, ki se ukvarjajo s podobno dejavnostjo. Festival nastaja v ko-produkciji različnih slovenskih inštitucij, ki sooblikujejo program, kot širitev njihovih že obstoječih zvočnih aktivnosti.

The Institute for Sonic Arts Research (IRZU) is a recently founded non-governmental organization. It is based on an interdisciplinary concept and is carrying out artistic productions in the field of electronic

music, audio technology research as well as educational activities.

The Sonic Arts Festival "Ear-Zoom" is one of our first major projects and is featuring established European and American institutes conducting similar activities. The festival is also aimed at creating a dialogue amongst other Slovenian institutions which are already running individual cycles of contemporary music and sonic art.

www.irzu.org

Sponzorji / Supported by /



Programska produkcija in infrastruktura /
Program production and infrastructure /



25. MAJ**Murcof** / The Leaf Label / Mexico / www.murcof.com

Glasba Murcofa je minimalistična in temelji na vzorcih, ki so pogosto iztrgani iz konteksta orkestralne glasbe sodobnih skladateljev. / *Murcof's music is sparse, minimalist, sample-based electronics. Many recordings feature orchestral samples from works by modern composers.*

**Performans / Performance**Kosovelova Dvorana
Cankarjev dom @ 20.00**26. MAJ****Takuro Mizuta Lippit** / Umetniški vodja / Artistic director of STEIM / Netherlands / www.steim.org**Daniel Schorno** / Koordinator umetniških projektov / Creative projects advisor at STEIM / Netherlands / www.steim.org**STEIM – 40 years in live electronic arts**

Predstavljeni bosta zgodovina Inštituta STEIM ter metodologija njihovega delovanja prek nekaterih umetnikov in njihovih projektov. / *The presentation will introduce the general history of STEIM and it's work method through various examples of artists and projects.*

Predavanje / LectureDvorana M3/M4
Cankarjev dom @ 17.00**Tao G. Vrhovec Sambolec** / Slovenia / Netherlands**A tree is dreaming of Ulpapuru** (2007)

Zvočna instalacija na drevesu / Sound installation in a tree

Vrhovec Sambolec je zvočni umetnik in glasbenik. Njegovo delo posega tudi v audio-vizualno in večmedijsko področje. / *Vrhovec Sambolec is a sound artist and musician. His works encompass audiovisual and mixed media works.*

Instalacija / Installation

Argentinski park @ 15.00

**DJ Sniff / Takuro Mizuta Lippit** / STEIM / Netherlands / www.steim.org**Turntable Reconstructions**

DJ Sniff (Takuro Mizuta Lippit) Uporablja gramofon kot inštrument s katerim ustvarja na področju eksperimentalne in improvizirane glasbe. / *DJ Sniff (Takuro Mizuta Lippit) is a turntable musician working in the field of improvised and experimental music.*

Performans / Performance

Galerija Kapelica @ 21.00

**Daniel Schorno** / STEIM / Netherlands / www.steim.org**11-of-12** (subcategory 53) **crackleScorpio** (Zitegeist)

Schorno je raziskovalec in skladatelj na Inštitutu STEIM. Ukvarja se z oblikovanjem novih elektronskih glasbenih inštrumentov, ter jih združuje z različnimi akustičnimi inštrumenti. / *Schorno is currently STEIM's composer-in-research. He collaborates with instrumental virtuosos, which play along with his new sensor based instruments.*

Performans / Performance

Galerija Kapelica @ 22.00

**27. MAJ****Luka Juhart** / Slovenia / www.lukajuhart.com

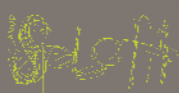
Harmonika / Accordion

Program: 1.) *Dialog über die Luft* (1994) – Vinko Globokar / 2.) *Meditacija o bližini* (2008) – Bojana Šaljič Podešva / 3.) *Accordica for accordion solo* (2009) - premiere – Uroš Rojko

Juhart je zaključil študij Glasbene akademije Trossingen – mentor: Hugo Noth. Mojstrski razred (2008): Glasbena akademija Würzburg – mentor: Stefan Hussong. / *Juhart studied at the Academy of Music in Trossingen, with prof. Hugo Noth. Master class with prof. Stefan Hussong at the Academy of Music in Würzburg in 2008.*

Koncert / Concert

Studio14, Radio Slovenija @ 20.00

**TILT** www.taogvs.org/TILTmain.html**Tomaž Grom** / Slovenia / Kontrabas / Double Bass**Tao G. Vrhovec Sambolec** / Slovenia / Elektronika / Live electronics (Max/Msp)

TILT (ustanovljen leta 1999) temelji na eksperimentiranju z zvokom in se ukvarja tako z improvizacijo, kot s strukturiranim pristopom do glasbe. / *TILT (founded in 1999) is based on sound experimentation, and is busy with improvisation and a structural approach.*

Performans / Performance

Studio14, Radio Slovenija @ 21.00

**28. MAJ****Diemo Schwarz, PhD** / IRCAM / France / imtr.ircam.fr**Current research and applications at the Real-Time Music Interaction Team (IMTR), Ircam-Centre Pompidou**

Skupina IMTR razvija interaktivne sisteme za modeliranje, analizo in sintezo zvoka v realnem času, vmesnike za analizo gibanja, ki se uporabljajo v glasbenih in plesnih performansih. / *The IMTR team works on interactive systems, real-time sound modeling, analysis and synthesis, gesture capture systems and interfaces, applied to music and dance performance.*

Diemo Schwarz (D) je raziskovalec na inštitutu IRCAM v Parizu. Je skladatelj elektronske glasbe ter glasbenik na bobnih in računalniku. / *Diemo Schwarz (D) is a researcher and developer at IRCAM, Paris, composer of electronic music, and musician on drums and laptop.*

29. MAJ**Xavier Serra, PhD** / MTG / Spain / mtg.upf.edu**Current Research at the Music Technology Group (MTG) of the Universitat Pompeu Fabra in Barcelona**

MTG raziskuje na področju obdelave, sinteze in analize zvoka, interaktivnih glasbenih sistemov, računalniških modelov glasbene percepcije in tehnologij glasbeno-socialnih mrež. / *The MTG carries out research in sound processing and synthesis; music content description interactive music systems, computational models of music cognition and the technologies related with music social networks.*

Serra je vodja oddelka MTG. Doktorsko delo, ki ga je 1989 opravil na Univerzi v Stanfordsu je še danes ključnega pomena na področju spektralnega procesiranja zvoka. / *Serra is the head of the MTG. PhD in Computer Music from Stanford University in 1989 with a dissertation on the spectral processing of musical sounds that is considered a key reference in the field.*

Diemo Schwarz / Germany / Elektronika / Live electronics**Luka Juhart** / Slovenia / Harmonika / Accordion

Procesiranje zvoka harmonike v živo s pomočjo programa CataRT (konkatenativna sinteza zvoka v realnem času), ki ga je razvila skupina IMTR na IRCAM-u. / *Live audio input (accordion) processed by the real-time corpus-based concatenative synthesis software CataRT, developed with the IMTR team at IRCAM.*

30. MAJ**Florian Krebs** / IEM / Austria / www.iem.at**Josef Klammer** / Austria / klammer.mur.at**HyperDrums / Delavnica / Workshop**

Demonstriran bo priklop igralnega kontrolerja *Wiimote* na računalnik, ter naknadna predelava senzorskih podatkov oz. njihovo mapiranje na zvočne parametre. / *A workshop on how to connect the game-controller Wiimote to the computer and use it as a human-computer interface. The sensor data is then processed and mapped to sound parameters.*

Krebs je leta 2008 delal na razvojnem projektu v FutureLab (Ars Electronica). Trenutno študira na Inštitutu za elektronsko glasbo v Gradcu. / *Krebs has in 2008 worked as a free developer for the Ars Electronica FutureLab and is currently studying at the Institute of Electronic Music in Graz.*

Klammer je skladatelj in glasbenik (bobni). Ukvarja se z elektronsko glasbo, performansom in analogno-digitalnimi zvočnimi projekti. / *Klammer is a freelance composer and instrumentalist (drums), engaged in electronic music performances, digital and analogue sound projects.*

Josef Klammer / Austria / Bobni in elektronika / Drums and live electronics**HyperDrums "Toysrus 3.0"** (2003/09)

Kompozicija pri kateri se v realnem času modulirajo zvoki bobnov na osnovi analize gest, dinamike ter diadohokineze štirih udov. / *A live-composition with real-time modulation of the percussion sounds from gestures, dynamics, and diadochokinesia of the four extremities.*

Predavanje / Lecture

Galerija Kapelica @ 20.00

**Predavanje / Lecture**

Galerija Kapelica @ 18.45

**Performans / Performance**

Galerija ŠKUC @ 21.00

**Delavnica / Workshop**

Galerija Kapelica @ 12.00–16.00

**Performans / Performance**

Galerija Kapelica @ 20.00

**6. JUNIJ****Keith Rowe** / UK / Kitara, elektronika / Guitar, live electronics
en.wikipedia.org/wiki/Keith_Rowe

Rowe je v zgodnjih 60-ih letih pričel igrati jazz. Je ustanovni član britanske skupine AMM, ki je ključnega pomena za razvoj sodobne improvizirane glasbe. / *Rowe began his career playing jazz in the early 1960's, He was a founding member of AMM, an important British free improvisation group.*

Treatise / Delavnica / Workshop @ 11.00–15.00

Udeleženci delavnice (instrumentalisti) bodo realizirali slavno kompozicijo *Treatise* (1967) britanskega skladatelja Corneliusa Cardewa. Kompozicija je zapisana na 193 straneh partiture s posebno grafično notacijo. / *The participants (instrumentalists) will work on the realization of the composition Treatise (1967) by British composer Cornelius Cardew. Treatise is a graphic musical score comprising 193 pages.*

7. JUNIJ**Treatise / Delavnica / Workshop**

(se nadaljuje / continues) @ 11.00–15.00

8. JUNIJ**Treatise / Delavnica / Workshop**

(se nadaljuje / continues) @ 11.00–15.00

Keith Rowe / UK / Kitara, elektronika / Guitar, live electronics

Rowe bo improviziral ter uporabljal kitaro na nekonvencionalne načine. Hkrati bo zvok predeloval z elektronskimi procesorji. / *Rowe will improvise with a guitar, demonstrating rather unconventional playing styles, while modifying its sound by electronic means.*

9. JUNIJ**Donald Glowinski, PhD** / InfoMusLab / Italy /www.infomus.org

Research work at InfoMus Lab – Casa Paganini, University of Genoa, Italy
InfoMus Lab se ukvarja z znanstveno-raziskovalnim delom na področju multi-medijskih in več-modalnih računalniških vmesnikov. Glavno področje delovanja predstavlja raziskovanje ter računalniško modeliranje telesnega gibanja oz. gest. / *InfoMus Lab carries out scientific research and systems development of multimedia and multimodal human-computer interfaces. A main research focus is on the understanding and exploitation of non-verbal expressive gestures.*

Glowinski je pridobil doktorat iz računalništva na Univerzi v Genovi. Raziskuje načine in sisteme avtomatskega prepoznavanja emocij na podlagi analize telesnega gibanja. / *Glowinski obtained PhD in Computer Engineering at the University of Genoa. He focuses in particular on the automatic recognition of emotions throughout the analysis of body movements.*

Roberto Doati / Music Conservatory Niccolò Paganini / Genova / Italy

Doati bo analiziral nekaj lastnih skladb ter opisal uporabo in pomen glasbene gestike v kompozicijah akuzmatične glasbe ter telesne geste kot kontrolnega parametra za izvajanje elektronske glasbe v realnem času. / *Doati will analyze some of his works and will describe the use of gesture both as articulation in acousmatic music and as gestural control of live electronics.*

Doati je skladatelj elektronske in računalniške glasbe. Interaktivne tehnologije ki omogočajo performerju izvajanje elektronske glasbe s pomočjo telesnega gibanja. / *Doati is a composer of electronic and computer music. Exploring interactive technologies that allow performer's gestures to control electronics.*

10. JUNIJ**Donald Glowinski, PhD** / InfoMusLab / Italy / www.infomus.org**EyesWeb**

EyesWeb je grafično programsko okolje namenjeno razvoju večmedijskih aplikacij, oz. procesiranju in analizi avdio-vizualnih vsebin v realnem času. / *EyesWeb is a graphical programming language designed to assist in the development of real-time multimedia analysis and processing applications.*

EyesWeb 1 / Delavnica / Workshop @ 10.30–12.30

Kako napisati program z EyesWeb XML; podatkovni tipi, I/O generatorji, taksonomija objektov. / *How to build a patch in EyesWeb XML*; datatypes, I/O, generators, blocks taxonomy.

Delavnica / Workshop

Jakopičeva galerija @ Termini delavnic so zraven opisov / Workshop times are next to their descriptions

**Delavnica / Workshop**

Jakopičeva galerija

Delavnica / Workshop

Jakopičeva galerija

Performans / Performance

Galerija Kapelica @ 20.00

**Predavanje / Lecture**

Jakopičeva galerija @ 18.00

**Predavanje / Lecture**

Jakopičeva galerija @ 19.30

**Delavnica / Workshop**

Jakopičeva galerija @ Termini delavnic so zraven opisov / Workshop times are next to their descriptions

