



**Another Language  
Performing Arts Co.**

## **PUBLIC SERVICE ANNOUNCEMENT**

---

March 28-29, 2008 7:00pm

March 30, 2008 4:00pm

Students Free with ID, \$5.00 Members and Seniors, \$7.00 General

Appropriate for Ages 12 – Older

General Seating Tickets Sold At The Door

Contact: Beth Miklavcic – Artistic Director

[bam@anotherlanguage.org](mailto:bam@anotherlanguage.org)

(801) 531-9419

[www.anotherlanguage.org/interplay](http://www.anotherlanguage.org/interplay)

---

### *InterPlay* Six Seasons of Access Grid Performance Research

By

Beth A. Miklavcic, Jimmy Miklavcic, Mike Daley,

Joe Geigel, Marla Schweppe, Joe Reitzer

#### ***InterPlay* Description**

*InterPlay* is a multifaceted, real-time, collaborative digital performance event that occurs simultaneously at multiple sites throughout the world. Artists and technologists from several institutions synchronously perform and collaborate in real time, utilizing media and technologies of various forms, such as Access Grid<sup>®</sup>, streaming digital cinema and audio, computer animation, remote MIDI control, motion capture, and interactive distributed virtual reality.

Electronic and acoustic musicians, dancers, actors, digital graphic artists, virtual reality designers, video artists, motion control engineers, a variety of technologists and others come together, integrating their ideas into this large scale distributed performance. Each site generates two or more video and audio streams then transmits them onto Internet2.

At the host site, these video streams are collected, processed, combined into the digital mix and then transmitted back onto the network. This multimedia content is integrated into each site's local live performance, creating a live distributed cinematic performance event, a richly woven audio-visual tapestry.

### **Access Grid Research at the University of Utah Center for High Performance Computing**

Currently there are three Access Grid nodes on the University of Utah campus. They include the Center for High Performance Computing, Eccles Health Sciences Library, and the College of Humanities.

The Access Grid was developed by Argonne National Laboratories. It is an integrated system of computers, display technology, video/audio devices and open source software that comprises a high quality videoconference system. More than two hundred forty six educational and research institutions from twenty seven countries throughout the world have adopted the Access Grid technology for their interdisciplinary and collaborative research.

The boundaries of its original purpose was stretched by repurposing and expanding the Access Grid from standard video conference meetings and using it as the tool to present, create and collaborate during live, distributed performances. By keeping up on the latest improvements, finding the best ways possible to use what is available and to continue to move forward as fast as the developments unfold, we, along with other users have influenced its refinement within the Access Grid Community, and have fostered its development at the University of Utah.

This year, the exciting developments in AGtk 3.1 is the incorporation of H.264 and MPEG-4 codecs developed by the SUMOVER Project, now known as AVATS, at the University College of London, England. Tom Uram, of Argonne National Laboratories, has recently made available, a beta version of the new video services. It is currently available only on Windows XP, but will be available soon for Linux and Mac OS. The H.264/MPEG-4 codec is a huge improvement over the previous H.261 video compression schema and lends itself to sending full resolution video streams without consuming precious network resources compared to other types of high quality video streaming technology such as DVTS or HDVTS. One issue currently being hammered out with the H.264 codec is flashing white vertical lines when using the IEEE 1394 interface. USB and standard composite video interfaces work fine. The new codec also adds additional load onto the processors, sometimes pushing them to eighty percent of utilization. Currently this affects the AGVCR recording system, developed by Derek Piper of Indiana University School of Informatics, when recording the new video streams.

### **Network Infrastructure**

We have been pushing the network capabilities to its limits and by doing so we have encouraged consistent improvements in multicast networking on campus. Through the dedicated work of Joe Breen, Assistant Director of Networking at the Center for High

Performance Computing and network engineers at Utah's NetCom and the Utah Education Network (UEN), multicast has been adopted as a vital protocol and is now considered to be integral to the network infrastructure throughout the campus.

Joe Breen heads up a group of people that provide day-to-day and advanced networking for many research groups as well as collaborate with research groups around the University of Utah in support of their networking needs, especially in the areas of new protocol deployment and grid computing integration. Joe also participates in working groups coordinated by Internet 2, including the Multicast and IPv6 working groups.

### **InterPlay: Carnivale**

March 28-30, 2008 the 6<sup>th</sup> InterPlay will be presented to the public. An annual event since 2003, the development and performance research format has been fostered under Julio Facelli –Director of the Center for High Performance Computing.

*InterPlay: Carnivale* directed by Jimmy and Beth Miklavcic, is an examination of the mystery of the performing soul through an amalgamation of a variety of celebratory performance mediums such as circus, Mardi Gras, carnival, amusement park, fair and arcade. This live, distributed, real-time, surrealist, cinematic performance will unfold as if walking into a memory of by-gone circuses, carnivals, parks and fairs. The *InterPlay* begins as if frozen in time, then the Carnivale awakens and the parade begins.

The collaboration includes content contributed from Mike Daley of Cardiff University Wales, UK. Mike is the Senior Technician for the Department of Computer Science at Cardiff University. He has built, operated and maintained several Access Grid Nodes and he supports the Visualization and Augmented Reality group.

His contribution to InterPlay: Carnivale is the AGCarousel; the program is written in pure JAVA and utilizes the Java Media Framework (JMF) to receive multiple video streams and display them in a carousel style around the screen. The program can utilize any screen resolution for its layout. Clicking the mouse on anyone of the video streams promotes that video to the front by rotating the carousel around. The program can quite happily cope with multicast streams. The latest version differs from the original because it no longer requires its own container; therefore the background is always visible.

Marla Schweppe and Joe Giegel from Rochester Institute of Technology; Rochester, New York are designing, along with their students, clowns, jesters and other characters that are created using the Maya 3D modeling and animation package. These characters are viewed and controlled in a shared virtual 3D space that employs a modified gaming engine, adapted specifically for theatrical use. This “virtual theatre” system enables theatrical performances to be shared over the Internet by participants in different physical locales. In *Carnivale*, the character models are controlled, in real-time, by a human director, who responds to the whole performance as it is being performed.

Marla is a full professor in the School of Design at the Rochester Institute of Technology (RIT). She serves as head of the Digital Studio, which includes the MFA program in Computer Graphics Design and she is the Director of Visualization. Early in her career

she worked in theatre, television and movies in New York City. She has been teaching computer graphics and animation for more than two decades. She developed the graduate and undergraduate programs in computer animation at RIT. Marla is currently developing a curriculum in game art and design in coordination with a game programming degree. Her creative work includes the incorporation of her theatrical background into virtual theatre over the Internet, interactive digital performances and experiences, animatronics, explorations in physical interaction, and collaborative support for visualization and simulation of information and ideas. Joe Geigel is an Associate Professor in the Computer Science Department of B. Thomas Golisano College of Computing and Information Sciences at Rochester Institute of Technology.

Joe Reitzer from the University of Illinois at Urbana-Champaign and the Technology, Research, Education and Commercialization Center (TRECC), West Chicago, Illinois is creating the score for *Carnivale*. He will utilize audio files created using commercially available software, Ableton Live 6, Apple Logic 7, Spectrasonics Stylus RMX, and some of the Waves Plug-Ins. The actual content is a combination of found MIDI files from the Internet and scanned sheet music OCR'd into MIDI files and are used as a starting point where original sound design and music created at Joe Reitzer's Noir Neko studio via synthesizers and sound modules are integrated. The event will utilize Ableton Live as the audio engine to deliver scene scores performed by Joe at TRECC, allowing for real-time mixing and processing.

### **Utah Contributions to *Carnivale***

The live *Carnivale* performance interaction, taking place in Utah, consists of a series of *Carnivale* characters. The Utah characters include Madame Flambé - The Bearded Woman (Ryan Lucas), Soliloquy -The Sword Fighting Harlequin Soldier (Hanelle Miklavcic); Mystique Francesca Futura - The Gypsy Fortune Teller (Elizabeth A. Miklavcic); Raqs Sharqi - The Belly Dancer (Maia Taylor) and Ballistrina Helium - The Balloon Peddler (Priscilla Steed). They will come alive in a performance with virtual and real characters on the screen that depicts a three-ring circus. Mr. Barney Carnacle -The Ring Master played by Travis Eberhard, will direct the attention to different aspects of the live and screen action.

The script written and directed by Beth Miklavcic focuses on the stories behind the performers as if the audience was back stage with the Carnies observing them moving from moments of performance to off stage behind the scenes. The Carnies interact with each other and their own demons, providing insight into the motivation behind the Carnies presence in the *Carnivale*.

Sam Liston-Digital Communication and Visualization Specialist at CHPC has created a background animation in flash for the opening parade scene as the *Carnivale* wakes up and comes into town. Beth Miklavcic has created background flash animations and slide shows for the other scenes in the *InterPlay: Carnival Performance*.

Beth is the Founding Artistic Director of Another Language Performing Arts Company established 1985. She is a choreographer, actress, filmmaker and performance artist. Beth serves as the co-director of the *InterPlay* performance series. She has over thirty years of

professional performance experience. For *InterPlay: Intransitive Senses* (2003), Beth created and performed Tea Party. Additional *InterPlay* works include *The Surface of Things* for *InterPlay: Hallucinations* (2004), *Dressers* for *InterPlay: Loose Minds in a Box* (2005), *Mind Waves* for *InterPlay: Dancing on the Banks of Packet Creek* (2006) and framed *InterPlay: Nel Tempo di Sogno* (2007). Beth is a multi-media specialist at the University of Utah Center for High Performance Computing. Her digital video works have been shown at a variety of film festivals and are available at the University of Utah Marriott Library Special Collections Division. Beth has appeared in several feature films such as *Napoleon Dynamite* and most recently in *Dark Matter* with Meryl Streep. She is the recipient of the Salt Lake City Mayor's Artist Award for Performing Arts. She holds a Masters of Fine Arts Degree in Modern Dance from the University of Utah, where she received two Orchesis Honorary Dance Society Awards; her choreography has been presented nationally and internationally.

Jimmy Miklavcic drives the video interactions among the variety of offerings from the participating sites through processing and mixing into a composite digital mash-up that is integrated back into the performance locally and onto the Internet2 to the other sites. The digital mix becomes a dynamic real-time visual interpretation of the live events happening concurrently at all three performing sites. As a form of extended cinema, this real-time, distributed, surrealistic cinematic event crosses various artistic forms and helps bring about a highly interdisciplinary collaboration to life.

Jimmy is the founding Executive Director of Another Language Performing Arts Company and the co-director of the InterPlay series, a telematic collaborative performance form. A mixture of computer science, visual arts, music composition, acting, and multimedia experience textures Jimmy's artistic background. In 1972, he began his visual arts studies at Richard Stockton College of New Jersey. Focused mainly on painting, he also became involved in other artists' projects in theater, performance art, and music. In 1978 he continued his studies in Performing Arts, including acting, technical theatre and electronic music at Cabrillo Community College, Aptos, CA. Shortly after arriving in Salt Lake City, Utah, Jimmy returned to study Computer Science at the University of Utah where he graduated in 1987 with a BS in Computer Science. Jimmy is currently the Multimedia Specialist for the Center for High Performance Computing and an Adjunct Assistant Professor in the Department of Communications at the University of Utah. He is the founder of ArtGrid, an informal consortium of artists and technologists that utilize the Access Grid technology for artistic pursuits. He has been awarded the Salt Lake City Mayor's Artists Award for the Performing Arts.

Viewers are encouraged to attend the live performances at the University of Utah INSCC Auditorium and at Rochester Institute of Technology for further information on viewing options go to [www.anotherlanguage.org/interplay/carnivale/viewingoptions.html](http://www.anotherlanguage.org/interplay/carnivale/viewingoptions.html). For additional information email [info@anotherlanguage.org](mailto:info@anotherlanguage.org) or call 801.585.9335