

# Projections

Winter Solstice 2012

## In this issue:

- Music as a learning tool
- July 20, 1969 by Paul Fraser
- California Academy of Sciences
- Upcoming Events

## Mark Slater - Music as a learning tool by Judith Rubin



With 20-40 minute run-times and an educational mandate, it isn't surprising that fulldome shows are sometimes considered a bit "talky". Composer Mark Slater suggests that more music and less narration could achieve the goal more powerfully.

The classically trained Slater, a native of the UK now based in Los Angeles, writes scores for movies and documentaries as well as background music for visitor attractions. He has scored several fulldome shows, including *Two Small Pieces of Glass*, *Solar System Odyssey*, *Natural Selection*, and *Planet Earth - Expedition Green*.

*continued on page 3*



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# A Note from Laura Misajet

## News & Notes

From Laura Misajet  
Sales Manager  
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As I write this, the world is due to end any minute now, according to various sources. If you received this newsletter, you can assume that perhaps there was a miscalculation or misinterpretation.

Carl Zeiss has completed the design of their new fisheye lens for the VELVET Duo fulldome system for domes 40 feet and under. Now VELVETS can accommodate a full range of dome diameters. Feel free to contact us anytime to arrange a VELVET technology demo in your dome.

Wishing all of you the happiest of holidays and a joyous New Year!



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Seiler Instrument is proud to announce the launch of our new corporate and planetarium website.

Check out the new layout and features and make sure to sign up to receive Seiler emails!

<http://www.seilerinst.com>



He wants full-dome producers to see music as more of a learning tool. "It engages minds on different levels. It can improve memory of the material and focus the attention. Music can be used to change the pace of the narrative, clarify and intensify the significance of visuals and words, and provides a link between screen and audience, reaching out and enveloping all into one single experience."



Slater wants more producers to trust the power of music. "Music helps you say what can't be said in words. What scientists work to convey, music can telegraph," he says. "Music accomplishes the scientific goal - it doesn't get in the way of it." The right music, that is. He adds, "It is a challenge to find the appropriate music for a show - something that suits the voiceover and provides the right transitions without calling attention to itself."

Slater's musical pedigree includes a father who is a professor of music and conductor, a degree from the London College of Music and a background as a cathedral chorister at Oxford. He no longer sings but plays piano and cello. He is fond of many styles of music, including rock, jazz and opera. "Wagner and his peers would be writing music for film today," says Slater, who named Hans Zimmer, John Williams, and Ennio Morricone as some of his favorite film composers.

Currently, Slater is working on the music for some visitor attractions in China, as well as the music for Dinosaurs at Dusk. "A dome, like a cathedral - is a very special space, a place to feel connected, to sense the wonder of the natural world."

He feels that museums and institutions can harness music for good results in more ways than they currently do. It can help drive repeat visitation, making people want to see a show more than once: "The emotional resonance of music creates a positive association." It can create a sense of arrival in the facility: "Start the experience sooner in museums and planetariums, and make it more immersive. Help visitors feel they are on an adventure. That creates active engagement and excitement."  
<http://www.markslater.net/>

You can read more from Judith Rubin on her blog: [judithrubin.blogspot.com](http://judithrubin.blogspot.com)

*While I was attending the Giant Screen Cinema Association Conference this fall in Sacramento, a group of us got to talking about Neil Armstrong and reminiscing about the first moon landing and where we were when we watched it unfolding live on television. Paul Fraser told us his personal experience from that day, and I thought I would share it with you.*

*~ Laura*

## **July 20, 1969**

### **By Paul Fraser**



***Paul Fraser***

*President of Blaze Digital  
Cinema Works in Westport, CT.*

*Paul can be contacted at:  
[paul@blazedigitalcinema.com](mailto:paul@blazedigitalcinema.com)*

In the summer of 1969 I was 10 years old, and my parents scheduled a two-week family vacation at a cottage on Lake Kennesis, in northern Ontario, about three hours north of Toronto. The cottage was booked for July 12 – 26. My parents didn't know or didn't care that the Apollo 11 moon landing – indeed the entire Apollo 11 mission – was scheduled to take place in that timeframe. But they had to know I was mesmerized by the NASA space program. I had followed all the Gemini and Apollo flights to that point. By 1969, I had decided I would be an astronaut, brushing aside the grown-ups' objections that NASA would never recruit Canadians. (NASA did, by 1984, when Marc Garneau was the first of several Canadians to fly on shuttle missions).

When it came time to pack our big boat of a car for the drive north, a banana-yellow 1968 Chevy Impala with black vinyl roof, I begged my father to bring our television from home, since it was, technically, a "portable", with built-in rabbit ears. ("Barely luggable" would have been a more apt description). Nothing doing, Dad said. I fumed some more.

Sunday, July 20th arrived. During the first week at the cottage we'd pick up the Toronto newspaper every day at the local marina, so I was aware the Apollo 11 mission was proceeding well, and the landing was scheduled for that afternoon. I was sulking. Finally, I got a bright idea. I would hijack our boat, (which I was not allowed to operate on my own), and drive it around the lake looking for television antennae, which weren't all that common. So without asking my parents, I made a run for the dock, untied the boat, and sped off.

After about a half hour on the lake looking for antennae poking above the treetops, I found one. I docked the boat, scampered up to the cottage door, and asked the

startled inhabitants – a nice elderly couple - if they would let me watch the moon landing with them. They had their TV on, and said something like “of course, come on in.”, followed by, “Do your parents know you’re out in the boat alone?” “Oh sure”, I lied.

After watching the fuzzy black and white images for about an hour, (thoroughly enthralled by the historic event it was), I returned to our cottage to face the music. My parents were quite strict and I expected my father especially would be very angry. To my surprise, he wasn’t in a rage at all, and in fact, he was forgiving.

To this day, Dad still brings up this episode with friends and family. I’m not exactly sure why – for a thoughtful, sensitive guy, and keen student of history that he is, this episode wasn’t exactly flattering. Maybe he likes to talk about it because it illustrated something he saw in me – an early signal of my enterprising nature, (if not outright stubbornness).



“That’s one small step for man, one giant leap for mankind.” – Neil Armstrong

# California Academy of Sciences visualization experts visit Germany:



*The Planetarium at Insulaner, Berlin.*

*Photo courtesy of Tim Horn*

Germany has long been known as the birth place of the planetarium and continues to lead the way in developing new technologies—a focal point for bringing together some of the world’s best researchers, engineers, educators, and content producers. The California Academy of Sciences, located in San Francisco, is on the cutting edge of scientific visualization for the dome. The Academy’s dynamic dome duo of Tim Horn and Ryan Wyatt recently returned from the 2012 Uniview Users Group meeting in Bochum, Germany. Featuring a Zeiss Universarium star projector and Zeiss full-dome VELVET video system, the Bochum Planetarium has proven that their new hybrid system, when used to its full potential, can make a huge impact on the institution’s visitors. Thus, they almost doubled their annual attendance to 200,000 since they added the digital system to their opto-mechanical star projector:

<http://www.planetarium-bochum.de>.

SCISS took the opportunity to present not just new features and production techniques within their software Uniview, but also to discuss future developments with their customers and to listen to feedback and comments. Uniview is a core piece of software used for a broad range of science visualizations at the Academy’s Visualization Studio, starting with astronomy data sets and expanding the scope all the way to Earth-based environmental stories. As one example, they shared a six-minute piece that describes a proposal to launch a space-based telescope that would catalog potentially hazardous asteroids, the first step in avoiding a dinosaur fate for humanity: <http://b612foundation.org>.

After the Uniview Users Group in Bochum, Tim and Ryan traveled to Berlin where they presented a fully immersive talk in both German and English at the Planetarium at Insulaner. Entitled “The Digital Planetarium: Astronomy Visualization in the 21st Century,” the program used extensive datasets from the Digital Universe Database and again with the unbeatable combination of the powerful visualization software Uniview and a Zeiss VELVET full-dome video system to illustrate how contemporary full-dome systems can change people’s perspective on the three-dimensional nature of the Universe. They plan to retool the presentation for an upcoming NightLife which takes place every Thursday



*Tim and Ryan stand in front of the classic Zeiss star projector at Insulaner in Berlin.*

night at the Academy. For more information be sure to check out:  
<http://www.calacademy.org/events/nightlife/>

Last but not least, Ryan and Tim headlined a one-day symposium at the Fraunhofer Institute in Berlin. According to their website, "Fraunhofer FOKUS develops solutions for the communication systems of tomorrow," including immersive video. At their Berlin campus, they have installed an experimental three-meter dome that seats six people extremely comfortably, and they are actively seeking to collaborate with the fulldome community on developing new technologies and improving existing infrastructure. FOKUS technologist Dr. Jérémie Gerhardt has visited the California Academy of Sciences to learn how the Visualization Studio manages its color pipeline to optimize the appearance of content in the new Morrison Planetarium.

On Friday, September 21st, FOKUS hosted a half-day symposium that brought together researchers, technologists, and fulldome producers to discuss tools, techniques, and technologies that are shaping the nascent medium. Tim and Ryan kicked off a morning of talks with a "making-of" presentation about their latest full-dome production "Earthquake: Evidence of a Restless Planet," and attendees had the opportunity (six at a time) to see the entire show in the intimate dome theater.

This special trip concluded with a tour of the historic Archenhold Observatory which houses the longest refracting telescope on Earth, 21 meters in length and was originally designed as an exhibition piece for the Berlin Industrial Show in 1896. For more information on the Archenhold Observatory and the Fraunhofer Institute you can visit the following web sites:

<http://www.sdtb.de/The-Archenhold-Observatory.499.0.html>

[http://www.fokus.fraunhofer.de/en/fokus/institut/was\\_ist\\_fokus/index.html](http://www.fokus.fraunhofer.de/en/fokus/institut/was_ist_fokus/index.html)

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**For those going green, Projections is now available electronically.**



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## UPCOMING EVENTS:

### **American Astronomical Society (AAS) January 7-10, 2013**

Long Beach Convention and Entertainment Center, Long Beach CA.

[www.aas.org](http://www.aas.org)

The 221st Meeting of the American Astronomical Society will be held from January 6-10, 2013 at the Long Beach Convention and Entertainment Center in Long Beach, California. We are attending and looking forward to seeing everyone there!

### **IMERSA Summit February 14-17, 2013**

Denver Museum of Nature and Science, Denver CO

[www.imersa.org](http://www.imersa.org)

The IMERSA Summit 2013 will be held from February 14-17, 2013 in Denver, CO. The focus this year is on successful approaches for acquisition, workflow, distribution, and exhibition. The summit will be full of fulldome film screenings, keynote speakers, panels, workshops, and vendor presentations.

### **Giant Screen Cinema Association (GSCA) Film Expo and Digital Symposium**

March 18-21, 2013

The Giant Screen Cinema Association Film Expo and Digital Symposium will be held from March 18-21, 2013 at Moody Gardens in Galveston, Texas.

### **American Alliance of Museums (AAM)**

May 19-22, 2013

The American Alliance of Museums will be held from May 19-22, 2013 at the Baltimore Convention Center in Baltimore, Maryland.

### **Fulldome Festival**

May 29-June 1, 2013

The 7th Annual Fulldome Festival will be held from May 29-June 1, 2013 at the Zeiss Planetarium in Jena, Germany. The festival will show professional, independent and student fulldome productions in different categories. The thematic focus in 2013 is Ornamental Dances.