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# The Thirty-Fifth Asilomar Microcomputer Workshop

April 15 – 17, 2009

(Motto: *Flat is the New UP!*)

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## Wednesday, April 15

- 1:30pm Opening Remarks** – Marianne Mueller, General Chair  
John Wharton, *Applications Research*, Program Chair  
Fred Terman, *Naval Postgraduate School*, Arrangements Czar
- 1:45pm Back to the Future!** – John Wharton, *Applications Research*, Chair
- Sea Cruise: A Galaxy 19 Launch-Mission Travelogue<sup>†</sup>  
Rick Voreck, *Space Systems/Loral*
  - The EvoGrid: Ratcheting Up Complexity Toward an Artificial Origin of Life Event  
Bruce Damer, *Biota.org* -and- *Institute for Advanced Study*
  - Where *Else* May Robot Cars Actually Take Us?  
Brad Templeton, *Electronic Frontier Foundation*
- 3:00pm Break**
- 3:30pm Digital Cinema: The Long Road** – Brian Berg, *Berg Software Design*, Chair
- Digital Cinema: Who, What, and Why  
Bill Elswick, *Entertainment Technology Associates, Inc.*
  - Mastering and Distribution: From Film to Digital  
John Hurst, *CineCert LLP*
  - Digital Cinema: Content Security and 3D  
Pierre-Anthony Lemieux, *Consultant*  
*Panel Q&A with Bill, John, and Pierre-Anthony*
- 5:00pm Reception and Dinner**
- 7:30pm Athematic Short Talks** – Bob Wedig, *Wedig Consulting, Inc.*, Time Keeper
- Engineering a Bio-Robotic Knee Orthosis: Testing Patience and Testing Patients  
Bob Horst, *Tibion Corporation*
  - An Unclassified Look at the GiG and the Future of Government Networks  
Bill Cheswick, *AT&T Labs-Research*
  - Hooking Up the Farallons: Wireless is For the Birds!  
Tim Pozar, *Late Night Software*
  - Resurrecting an Ampex FR-900 Tape Drive to Retrieve Lost Lunar Imagery  
Dennis Wingo, *Skycorp Incorporated*
  - Jean Hoerni and the Planar Process  
Christophe Lecuyer, *University of California*
  - Lost in a (Computing) Cloud: The Joys of Flying Blind  
Joel Williams, *emLinux*
  - A Personal Epiphany on Green and Alternative Transportation Systems  
Dwayne Hendricks, *Tetherless Access*
  - Twill Wicked: Some Crazy Ideas for a New Kind of Car  
Chris Tacklind, *Twill Tech Inc.*
  - Star Trek: Boldly Going Where No Mac Had Gone Before  
Tom Rolander, *CrossLoop, Incorporated*
- 11:00pm Happy Hour**

## Thursday, April 16

**8:15am System Generations: Microcomputers Past, Present, and Future** – Ken Shoemaker, *Intel Corporation*, Chair

- What's New in Microprocessors – As I See It  
Ken Shoemaker, *Intel Corporation*
- Apollo 11: The Computer Inside®  
Dennis Wingo, *Skycorp Incorporated*
- An Old Supercomputer Guy Looks at Modern Graphics Processors and Other Problems That Just Won't Go Away  
Andy Glew, *Intel Corporation*
- Parimics' Parallel Processing Chipset: 20 TeraOps and 1000 GFLOPS for Machine Vision Applications  
Axel Kloth, *Parimics Inc. R&D*

**10:00am Break**

**10:30am Inverting the Grid** – Dewayne Hendricks, *Tetherless Access, Inc.*, Chair

- Augmenting the Smart Grid with Ad Hoc Sensors and Ambient Intelligence  
Warren Stringer, *μSenti*
- Power To Plug In: Making Consumer Power Sources as Easy to Install as an Electric Dryer  
Kee Nethery, *Kagi*
- The Rush to Clean Power: How *Not* to Produce Green Energy  
David Newman, *Former CEO of a Green Energy Start-Up*

**12:00n Lunch**

**1:30pm Cybernetic Anthropology** – Mary Eisenhart, *Mary Eisenhart Editorial Services*, Chair

- Magical Thinking in Consumer Relationships With Their Data  
Cathy Marshall, *Microsoft Research*
- Creating Markets and Capturing Network Value with P2P File Sharing  
Andrew Orłowski, *The Register*
- An Expanded Role for Test-Driven Development: The Eclipse Foundation “Swim” Experience  
Ward Cunningham, *AboutUs.org*

**3:00pm Break**

**3:30pm Censorship and Surveillance on the Internet** – Marianne Mueller, Chair

- Nation-State Routing: Censorship, Wiretapping and BGP  
Josh Karlin, *University of New Mexico*
- Concept Doppler: Global Internet Censorship, and What We Can Do About It  
Jed Crandall, *University of New Mexico*
- Interception, Traceback, and Jurisdictional Arbitrage in the Age of High-Availability Network Service Architectures  
Bill Woodcock, *Packet Clearing House*

**5:00pm Reception and Dinner**

**7:30pm Open Discussion: A *Rich* Asilomar Tradition** – Mary Eisenhart, *Mary Eisenhart Editorial Services* & Craig Hughes, *Pro Se*, Tag-Team RAT Patrols;  
Bruce Koball, *Motion West*, Resident A/V Wizard

( Ten-minute presentations on any subject you choose. Contact Mary Eisenhart as soon as practical after registration to secure your time slot. *First-come first-assigned!* )

## Friday, April 17

**5:30am Pre-dawn comet search, satellite tracking, and UFO watch**

( Self-organizing; attendance optional. )

**8:30am Multiple Views and Alternative Ways of Seeing** – Tamara Munzner, *University of British Columbia*, Chair

- Biology is Destiny: Of Graphs and Genes  
Tamara Munzner, *University of British Columbia*
- Mixed Reality and the Chocolate Factory  
Maribeth Back, *FX Palo Alto Laboratory*
- Why One is Always The Wrong Number  
Jim Gettys, *X.org*

**10:00am Break**

**10:30am WWED? (What Would Engelbart Do?)** – Panel Discussion and Debate.

Bill Cheswick, *AT&T Labs-Research*, Moderator

*Panel discussion, audience comments, and Q&A. Panelists to include:*

- Ward Cunningham, *AboutUs.org*
- Jim Gettys, *X.org*
- Kirk McKusick, *Author and FreeBSD Committer*
- Andrew Orłowski, *The Register*

**11:45am Closing Remarks** – Marianne Mueller, General Chair

**12:15pm Outdoor Barbecue Lunch** (weather permitting)

**1:45pm Workshop Adjourns**

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### Program and Planning Committee

Michelle Aden		Tim Pozar
Brian A. Berg	Craig Hughes	David S.H. Rosenthal
Bill Cheswick	Bruce Koball	Ken Shoemaker
Fred Clegg	Stan Mazor	Fred Terman
Mary Eisenhart	Anne Mitchell	Bob Wedig
Janet Guns	Marianne Mueller	John Wharton
Dewayne Hendricks	Christine Peterson	Pierluigi Zappacosta

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† The *Sea Launch Commander* and *Odyssey* launch platform are on-station at the equator this week, preparing to launch a SICRAL 1B European communications and defense satellite.

If the launch countdown begins while the Workshop is in progress we will attempt to patch a live video webcast into the AMW A/V system. Watch for further details.