

This insert and www.futureinreview.com reflect the most current updates to the FiRe Agenda. See hard copy Event Book for details and speaker bios.

TUESDAY, OCTOBER 6

5:00 - 6:30pm: Registration and Cocktail Reception with finger food (Adult partners welcome); **Featuring the Rene Hart Jazz Ensemble** – *Flagstaff Mountain Deck*

6:30 - 6:45pm: Welcome to FiRe, and Introductions to FiRe/Rodel Thunderbird Interns & FiRe Staff: Sharon Anderson Morris, SNS Programs Director – *Flagstaff Mountain Deck*

7:00 - 7:30pm: Appreciations: Sharon Anderson Morris; and **“The Power of Patterns”:** Mark Anderson – *Olympic Ballroom*

7:30 - 8:15pm: Dinner – *Olympic Ballroom*

8:15 - 9:00pm: Dinner Presentation: “Building Elon Musk’s Hyperloop”: Bibop Gabriele Gresta; w/ host Mark Anderson

9:00 - - : Q&A and Discussion

WEDNESDAY, OCTOBER 7

6:45 - 7:55am: Buffet Breakfast – *Olympic Ballroom*

7:55 - 8:00am: Welcome & Opening Remarks: “The Power of Patterns”: Mark Anderson – *Stein Eriksen Ballroom*

8:00 - 8:30am: “Exploratory Visualization for Pattern Discovery” (in 3 parts): Chris Johnson, Miriah Meyer, and Ross Whitaker; w/ host Mark Anderson

8:30 - 9:00am: Announcement: SNS & UCSD create a new FiRe Lab: Larry Smarr and Mark Anderson; *and Discussion: “Building the Pattern Recognition Lab”:* Ken Kreutz-Delgado, Akihiro Nakao, and Mark Anderson; *and “Launching the Next Net: The 100Gps Pacific Research Platform”:* w/ host Larry Smarr

9:00 - 9:30am: A Centerpiece Conversation with Dharmendra Modha: “The World’s First Pattern Recognition Processor: The TrueNorth Chip”; w/ host Mark Anderson

9:30 - 9:45am: “Introducing Biomimetic Programming, and a New Toolkit for a New Paradigm”: Mike Riddle; w/ host Brad Holtz

9:45 - 10:15am: A Centerpiece Conversation with Tom Stonehocker and Kamran Elahian: “Look Out, Siri! Here Comes Hound (on Apple!)”; w/ host Brett Horvath

10:15 - 10:45am: BREAK – *Directly outside Stein Eriksen Ballroom* {Thank you to USTAR, Sponsor of this Break}

10:45 - 11:15am: A Centerpiece Conversation with Shane Wall: “Creating a Blended Reality: 3D Transformations”; w/ host Ed Butler

11:15 - 11:45am: “FiReStarters I: Six Companies Improving the World”: AnthroTronix, Applied DNA Sciences, Haydale, Mojio, Nanotech Bio, and Nantero; w/ BBC host Ed Butler

11:45 - 12:15pm: “Financing Innovation: Are Huge Private Tech Company Valuations Leading to a Meltdown?” Ken Goldman and Douglas Jamison; w/ host Nathan McDonald

12:15 - 1:30pm: LUNCH – *Flagstaff Mountain Deck [weather alternate: Odin Valhalla]*

1:30 - 2:00pm: “The Patterns of Language: Using Computers to Communicate with Other Species”: Con Slobodchikoff and Barry Briggs; w/ host Jason Preston

2:00 - 2:30pm: The FiRe CTO Design Challenge: “Building the First Pattern Computer System”: Judges: Mark Anderson et al. *Challenge Team:* Hugh Bradlow, Ty Carlson, Steve Coy, Dharmendra Modha, Mike Riddle, Greg Schmergel, David Schoenberger, Larry Smarr, Tim Stonehocker, Mark Sunday, and others *tbd*

2:30 - 3:00pm: “Advanced Automotive Technologies: Electric Cars, New Networks, and IoT Security”: James Barfield, Jay Giraud, and Robert F. Anderson; w/ host Tom Taylor

3:00 - 3:30pm: “New Energy Technologies”: Richard Barth, Leslie Dewan, Simon Hackett, and Joe Lassiter; w/ host Ray Rothrock

3:30 - 4:00pm: “FiReStarters II: Six Companies Improving the World”: CertainSafe, NXT-ID, Redflow, Transatomic Power, True North Therapeutics, and ValidSoft; with BBC host Ed Butler

4:00 - 5:00pm: BREAKOUTS (*Locations subject to change*):

I. FiRe CTO Design Challenge Working Session: “Building the First Pattern Computer System”: Moderated by the Challenge Team – *Flagstaff Room*

II. “Community Building with Technology and Philanthropy”: Moderated by Mike Winder et al. – *Silver Room*

III. “Technology in Education: Progress in 1:1 Computing in Schools Today”: Moderated by David Engle and Marc Prensky – *Bronze Room*

IV. “AI, Robotics, and Machine Learning”: Moderated by Joseph Smarr and Brett Horvath – *Gold Room*

V. “Genetics, Demographics, Ancestry, and Healthcare”: Moderated by Kenneth Chahine – *Alpine Room*

5:00 - 7:00pm: Meet the FiReStarters: Exhibition and Reception, including cocktails and hors d’oeuvres – *Stein Eriksen Ballroom Gallery (directly outside Ballroom)*

7:00 - 8:30pm + : FiRe Film Night: Screening of *Racing Extinction*: Introduction, Sharon Anderson Morris and Mark Anderson (7:00-7:15), *Racing Extinction* (7:15-8:30), Discussion w/ Louie Psihoyos & Shawn Heinrichs (8:30---); Adult partners welcome – *Stein Eriksen Ballroom*

THURSDAY, OCTOBER 8

6:45 - 7:50am: Buffet Breakfast – *Olympic Ballroom*

7:55 - 8:00am: Welcome and Announcements: Mark Anderson – *Stein Eriksen Ballroom*

8:00 - 8:30am: “The Next Wireless World: From 5G to IoT”: Shahid Ahmed, Kate McKenzie, and Robert Morrison; w/ host Chetan Sharma

8:30 - 9:00am: FiReBooks’ First e-Book Release: *Stealth Japan* – Scott Foster; w/ host Russ Daggatt

9:00 - 9:30am: FiReFilms Update: Sharon Anderson Morris; followed by “Documentaries That Change the World: Meet the Directors”: Louie Psihoyos, Sue Williams, Jamie Bernstein, and Hilary Sparrow; w/ host GERALYN DREYFOUS

9:30 - 10:00am: “Avoiding Global Extinction: Technology’s Role”: Louie Psihoyos, Shawn Heinrichs, and Christopher Clark; w/ BBC host Ed Butler

10:00 - 10:30am: BREAK – *Directly outside Stein Eriksen Ballroom*

10:30 - 10:35am: For Eric: In Memory of Eric Openshaw – *Stein Eriksen Ballroom*

10:35 - 11:00am: “New Breakthroughs in Medicine”: Leah Boyer, Kenneth Chahine, Corinna E. Lathan, Vicki J. Lyons, and Nancy Stagliano; w/ BBC host Ed Butler

11:00 - 11:30am: INVNT/IP First Release: “Behind the China Crash: How China Makes Money”: Evan Anderson and Mark Anderson; w/ BBC host Ed Butler

11:30 - 12:00pm: “Next-Generation Security”: David Schoenberger, Shawn Edmunds, James A. Hayward, Gino Pereira, Jeff Hudson, and Bryan Strong; w/ host Richard H.L. Marshall Esq.

12:00 - 1:00pm: LUNCH – *Flagstaff Mountain Deck [weather alternate: Odin Valhalla]*

1:00 - 1:30pm: “The Cloud and the Enterprise: New IT Operating Models”: Steve Daheb, Saravan Rajendran, James Staten, and others *tbd*; w/ host Gregory Ness

1:30 - 2:00pm: “From Makers to Manufacturing: Graphene Comes of Age”: Ray Gibbs, Will Martinez, Soroush Nazarpour, and Elena Polyakova; w/ host Steve Waite

2:00 - 2:30pm: “The Future of Healthcare: Diagnosing the Undiagnosed”: Katia Moritz, Karen Possemato, and Steve Watkins; w/ host David Ewing Duncan

2:30 - 3:00pm: “Patterns in Disruption and Market Value Creation”: “*Patterns in Disruption*”: John Hagel III; “*Patterns in Market Value Creation*”: Bill Ribaud; w/ host Marcel van Hulle

3:00 - 3:30pm: “HotSpots: Five Views of the Future”: Andrew Mbuya, Nathanael Miller, Will Perego, Joseph Smarr, and Mike Winder

3:30 - 4:00pm: BREAK – *Directly outside Stein Eriksen Ballroom*

4:00 - 5:00pm: BREAKOUTS (*Locations subject to change*)

I. FiRe CTO Design Challenge Working Session: “Building the First Pattern Computer System”: Moderated by the Challenge Team – *Flagstaff Room*

II. FiReFilms: “The Future of World-Changing Documentaries: Meet the Directors”: Moderated by Sharon Anderson Morris and Hilary Sparrow – *Viking Boardroom (Separate building)*

III. INVNT/IP Open Session (for all interested parties): “The China Crash”: Moderated by Evan Anderson – *Silver Room*

IV. “Water Futures”: Moderated by Wendy Pabich – *Gold Room*

5:00pm - - : Dinner off-agenda: Ask Concierge for recommendations!

8:00pm - - : The FiRe Social: Meetup for all FiRe Participants, including Speakers, FiReStarters, Exhibitors, Press, and SNS & FiRe Staff – Featuring the Rene Hart Jazz Ensemble & the first Brain-Interactive Jazz Performance – *Olympic Ballroom Foyer*

FRIDAY, OCTOBER 9

6:45 - 7:50am: Buffet Breakfast – *Olympic Ballroom*

7:55 - 8:00am: Announcements – *Stein Eriksen Ballroom*

8:00 - 8:30am: “Does Information Want to Be Free?” Cory Doctorow and Katherine Oyama; w/ BBC host Ed Butler

8:30 - 8:45am: “Machines Learning About People: What’s Next?” Joseph Smarr; w/ host Ed Butler

8:45 - 9:00am: “The Cambridge Declaration on Consciousness: United States Launch”: Philip Low; w/ host Ed Butler

9:00 - 9:30am: “Machine Intelligence in a Noisy and Dangerous World,” including participation in the FiRe / Calit2 Pattern Recognition Laboratory: Daniel Goldin; w/ host Larry Smarr

9:30 - 10:00am: “Looking Further: How Science Fiction Accelerates R&D”: Ramez Naam; w/ host Berit Anderson

10:00 - 11:00am: Conclusion: FiRe CTO Design Challenge: “Building the First Pattern Computer System”: *Judges* Mark Anderson et al.; *Challenge Team* Hugh Bradlow, Ty Carlson, Steve Coy, Dharmendra Modha, Mike Riddle, Greg Schmergel, David Schoenberger, Larry Smarr, Tim Stonehocker, Mark Sunday, and others; *Including “Building the Next Net: The 100GB PRP”* w/ Larry Smarr

11:00 - 11:30am: “Your Turn: The Next Five Years”: **Audience Questions and Comments:** Hosted by Mark Anderson

11:30am - 12:00pm: Closing Comments and Summary, including FiReBooks’ Next Title: *The Pattern Future*; Mark Anderson
