



Center for CONSCIOUSNESS STUDIES

TOWARD A SCIENCE OF CONSCIOUSNESS

April 12-17, 2010
Tucson Convention Center
Tucson, Arizona



Sponsored by the
CENTER FOR CONSCIOUSNESS STUDIES
The University of Arizona

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Center for CONSCIOUSNESS STUDIES



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WELCOME

Welcome to the 2010 Tucson conference “Toward a Science of Consciousness,” the ninth in a series of biennial gatherings on a broad spectrum of approaches to the fundamental question of how the brain produces conscious experience. As in recent years, we expect over 700 participants from 45 countries on 6 continents. Sponsored and organized by the Center for Consciousness Studies at the University of Arizona, the Tucson conferences have played a major role in shaping an interdisciplinary field composed of neuroscience, philosophy, medicine, physics, biology, psychology, anthropology, contemplative and experiential traditions, arts and humanities and others. Participants will give 400 presentations included in 15 pre-conference workshops, 12 plenary or keynote sessions, 21 concurrent talk sessions, 2 poster sessions, 2 art-tech interactive sessions and special evening Club Consciousness performances.

The conference and Center wish to thank members of the Program Committee, Center for Consciousness Studies/TSC Conference Manager Arlene ‘Abi’ Behar-Montefiore, Ed Xia, SBS Tech for registration and abstract systems, David Cantrell of AHSC Biomedical Communications for art design, Darla Keneston of AHSC Biomedical Communications for graphic design, and Michael Branch, AHSC Biomedical Communications for web support. We also thank Commotion Studios for A/V, Backcountry Productions for conference recording, U.S. Expo, the Facilities of the Tucson Convention Center (managed by Kate Calhoun), Hotel Arizona (Gayle Venner, Director of Sales) Doug Kramer Tours, Maynards at the Depot, and the Westin La Paloma.

We are grateful to all keynote, plenary, concurrent, poster and art-tech demo session presenters, workshop facilitators, Club Consciousness entertainers and attendees whose registration fees fund the conference. We also thank the University of Arizona Departments of Psychology, Philosophy, the College of Science and the College of Social and Behavioral Studies, the College of Medicine and the Department of Anesthesiology. Thank you to Robert A. Pepperell, Cardiff School of Art and Design and Jim Laukes for chairing the art-tech demo sessions. We thank The Fetzer Institute for initial funding of the Center, the YeTaDeL Foundation for ongoing support, the Journal of Consciousness Studies, Keith Sutherland and David Chalmers for the categorization/indexing system. We are grateful for the generous contribution from Deepak Chopra and The Chopra Foundation, www.deepakchopra.com.

FINDING YOUR WAY AROUND THE CONFERENCE

A map of the conference sites appears on the inside back cover. Within walking distance (to the northeast of the Tucson Convention Center and Hotel Arizona) are various cafes, galleries, restaurants, bars and other sites, including the Tucson Museum of Art, the 4th Avenue district and the Hotel Congress. The University of Arizona campus is within a healthy 30-minute walk. The Hotel can arrange taxi cabs to The Desert Museum, the University of Arizona campus, or to one of several shopping malls.

SESSIONS

Several types of presentation sessions constitute the conference program

PLENARY SESSIONS

Held in the spacious Leo Rich Theater, 12 plenary and keynote sessions (3 per full day) are presented to the entire conference audience

CONCURRENT TALK SESSIONS

After the Plenary Program Tuesday, Wednesday and Friday 4:30 to 6:35 pm, seven parallel sessions with 5 speakers each (105 speakers total) cover particular focused areas

POSTER SESSIONS

Over 200 poster presentations in two sessions Wednesday and Friday evenings 7:00 pm to 9:45 pm. Presenters stand by their material posted on a large board as audience circulates. Cash bar.

ART & TECHNOLOGY DEMO SESSIONS

More interactive and experiential than concurrent sessions, ART/TECH/DEMO presentations occur in evenings adjacent to the Poster Session, demonstrating art, media and experiential techniques with power point, body and canvas. Cash bar.

INSTALLATIONS: CONSCIOUSNESS UNDER THE SCOPE

The Conference is pleased to host BioScapes®, the international traveling exhibit of outstanding images and videos from the Olympus BioScapes Digital Imaging Competition®, a world-wide contest for the best microscopic images. For the Tucson conference, images and video related to consciousness, awareness, brain, neurons and glia have been selected. Abi Behar Montefiore has also arranged for the BioScapes® installation be shown at the Arizona Health Sciences Library following the conference. Special thanks to the

Olympus Corporation of America and R. Vincent Parks, Edge Communications. Tucson-based computer artist Lucia Grossberger Morales produced the DVD installation, Consciousness Under the Scope from the BioScapes® art. She will also present her own installation 'Meditations on Computer Patterns.'

LATE NIGHT - CLUB CONSCIOUSNESS

For the first time – Cabaret-style Club Consciousness at the Leo Rich Theatre, 9:45 pm to 11:15 pm Tuesday, Wednesday and 9:45 to Midnight Friday nights. Professional entertainers, singers, comedians and poets with interest in consciousness will perform. Friday night includes the traditional Poetry Slam and Zombie Blues. Cash bar.

CONFERENCE DINNER

Thursday evening at the elegant Westin La Paloma Hotel and Resort in the heart of the beautiful Catalina Foothills, enjoy a wonderful meal, drinks and light entertainment. Ticket required (other conference social events included in registration).

ADDITIONAL SOCIAL EVENTS

- **WELCOME RECEPTION** – Tuesday evening at Hotel Arizona in the Starlight Ballroom and courtyard. Meet and mingle with food and drinks (cash bar)
- **WEBCONSCIOUSNESS ALUMNI** – Special thanks to Bernard J. Baars for his innovative leadership with the successful online Consciousness: The Webcourse and Advanced Seminars, and Jeffrey Martin for his participation and technical assistance. Designated Areas for Alumni at various social events.
- **HOSPITALITY SUITE** – The Conference Hospitality Suite on the 9th floor of Hotel Arizona will welcome our attendees – times TBA, organized by UA Philosophy graduate Czarina Salido. Special thanks to Trader Joe's (North Campbell Ave-Tucson) for their donation of flowers for the registration desk and food items for the hospitality suite. Also thanks to Safeway, Rincon Market and Whole Foods.
- **SIDE TRIPS** – Thursday afternoon - Visits to scenic Mt. Lemmon, Sabino Canyon and a Desert Jeep Ride for the adventurous.

POETRY SLAM AND ZOMBIE BLUES/FRIDAY NIGHT CLUB CONSCIOUSNESS

As in previous conferences, a Poetry Slam/Zombie Blues/Talent Show will take place Friday evening, April 16 from 10 pm to Midnight (cash bar). Attendees are invited to recite an original poem onstage on any topic related to consciousness to a cheering and sometimes jeering audience. Following the poems, attendees offer one or more verses of the Zombie Blues with musical accompaniment. The original soul-less lament: *"I act like you act, I do what you do, But I don't know what it's like to be you. What consciousness is - I ain't got a clue....I got the Zombie Blues..."* Start working on your own verses now!

END-OF-CONSCIOUSNESS PARTY

Saturday night (7:30-???) the traditional End-of-Consciousness party will take place at Maynards at the Depot, a 10 minute walk from the conference location. Enjoy food, drinks/cash bar, and music by DJ Jake & Fort Awesome in an indoor/outdoor setting by the tracks of the Southern Pacific Railroad.

The night is also 'Tucson pub crawl', in which a dozen walking-distance bars and clubs feature live music for one five dollar cover-fee. (We have 40 tickets to sell for \$5 each.)

PUBLISHER & COMMERCIAL EXHIBITS

- MIT Press
- Oxford University Press
- Journal of Consciousness Studies/Imprint Academic
- International Association for Near-Death Studies
- Olympus BioScapes Digital Imaging Competition®
- Center for Consciousness Studies
- Conscious Pictures/The 'Consciousness Chronicles'
- Saybrook University
- John Benjamins Publishing Company
- Gorgeous GoddessWear
- Walling - Hicks Authors
- Backcountry Productions

TOWARD A SCIENCE OF CONSCIOUSNESS 2011 IN ISRAEL

Consciousness, Emotion and Self

Next year's TSC will take place in Tel Aviv, Israel in the spring. Along with rigorous discussions of philosophy of mind, brain and beyond, this conference will focus on the interplay between self, emotion and consciousness. Hosts of the conference include leading neuroscientists Prof. Talma Hendler from Tel Aviv University and Dr. Abraham Zangen from the Weizmann Institute. Further details will follow on the TSC website.

PROGRAM OUTLINE

TOWARD A SCIENCE OF CONSCIOUSNESS

April 13-17, 2010

Tucson Convention Center and Hotel Arizona

TUESDAY April 13

Registration

Leo Rich Theatre

1:45 - 4:10 pm **CONFERENCE OPENING/PLENARY 1**

Leo Rich Theatre

William James Centennial

Eugene Taylor, Bernard J. Baars, Bruce Mangan

4:30 - 6:35 pm **CONCURRENT SESSIONS 1-7**

Tucson Convention Center (TCC)

Hotel Arizona (HA)

- | | |
|--|--------------------------|
| C1 Consciousness, Representation and Thought | TCC - Coconino |
| C2 Materialism, Dualism, and Higher-Order Thought | TCC - Gila |
| C3 Neurobiology and Theories of Consciousness: Brain Networks | TCC - Maricopa |
| C4 Unconscious Processes | TCC - Graham |
| C5 AI and Computational Models | TCC - Greenlee |
| C6 Art, Media and Conscious Perception | HA - Grand Ballroom West |
| C7 Altered States of Consciousness | HA - Grand Ballroom East |

7:00 - 9:30 pm **Welcome Reception**

Hotel Arizona - Courtyard/Starlight Ballroom

Light food and drinks

9:45 - 11:15 pm **Club Consciousness 1**

Leo Rich Theatre

WEDNESDAY April 14

- 8:30 - 10:40 am **PLENARY 2** Leo Rich Theatre
DOUBLE KEYNOTE
Marcus E. Raichle
 Brain Dark Matter and Default Mode Networks
Robert G. Shulman
 Brain Energy Supports the State of
 Consciousness
- 10:40 - 11:10 am Break
- 11:10 am - 12:35 pm **PLENARY 3** Leo Rich Theatre
 Bodily Awareness
Henrik Ehrsson, Frédérique De Vignemont
- 12:35 - 2:00 pm Lunch
- 2:00 - 4:10 pm **PLENARY 4** Leo Rich Theatre
 Computational Models of Consciousness
Dharmendra Modha, Ben Goertzel, Marc Ebner
- 4:30 - 6:35 pm **CONCURRENT SESSIONS C8-C14**
 Tucson Convention Center (TCC)
 Hotel Arizona (HA)
- C8** Introspection TCC - Maricopa
- C9** Panpsychism and Epiphenomenalism TCC - Mohave
- C10** Phenomenology and First-Person Approaches HA - Cholla
- C11** Dreaming HA - Manzanita
- C12** Neural Correlates of Consciousness HA - Ocotillo
- C13** Quantum and Subcellular Approaches TCC - Leo Rich
 Theater
- C14** Contemplative, Spiritual
 and Religious Approaches HA - Grand
 Ballroom West
- 7:00 - 9:45 pm **POSTER SESSION 1 (P1-P6)**
 TCC - Gila/Coconino/Graham/Greenlee
- 7:00 - 9:20 pm **ART-TECH DEMO 1**
 TCC - Mohave/Maricopa
- 9:45 - 11:15 pm **Club Consciousness 2**
 Leo Rich Theatre

THURSDAY April 15

8:30 - 11:00 am **PLENARY 5** Leo Rich Theatre
 Multimodal Experience
*Patricia Lynne Duffy, Barry Stein,
 Casey O'Callaghan, Michael Proulx*

11:00 - 11:30 am Break

11:30 am - 12:50 pm **PLENARY 6 KEYNOTE** Leo Rich Theatre
David Chalmers
 The Singularity: A Philosophical Analysis

Thursday afternoon: Free

Side Trips/Note: Motor Coaches will leave directly from the Leo Rich Theatre. Trip goers who will be attending the evening dinner will be taken directly to the Dinner Site at the conclusion of their trip. Others will continue back to the Hotel Arizona. Boxed lunches (*ordered in advance*) for the trip goers will be waiting with their designated tour bus.

6:30 - 10:30 pm Conference Dinner
 La Paloma Hotel & Resort
*Selections on Violin, Martha Curtis
 Sky Nelson and Chase Masterson, jazz
 selections (with a conscious twist!)
 (casual dress)*

FRIDAY April 16

8:30 - 10:40 am **PLENARY 7** Leo Rich Theatre
 Transformation of Consciousness
*Cassandra Vieten, Jeffery Martin,
 Za Choeje Rinpoche*

10:40 - 11:10 am Break

11:10 am - 12:35 pm **PLENARY 8 KEYNOTE** Leo Rich Theatre
Antonio Damasio
 The Neural Self

12:35 - 2:00 pm Lunch

2:00 - 4:10 pm **PLENARY 9** Leo Rich Theatre
Theories of Consciousness
Sid Kouider, Robert Van Gulick, Galen Strawson

4:30 - 6:35 pm **CONCURRENT SESSIONS 15-21**

- | | | |
|------------|--|--------------------------|
| C15 | Consciousness and the Self | TCC - Maricopa |
| C16 | Ontology of Perception | TCC - Mohave |
| C17 | Neurobiology and Theories
of Consciousness: Foundations | TCC - Leo Rich Theatre |
| C18 | Psychotherapy and Transformation | HA - Cholla |
| C19 | Mind-Wandering | HA - Ocotillo |
| C20 | Evolution of Consciousness | HA - Grand Ballroom West |
| C21 | Nonlocal and Anomalous
Phenomena | HA - Grand Ballroom East |

7:00 - 9:20 pm **ART-TECH DEMO 2**
TCC - Maricopa/Mohave

7:00 - 9:45 pm **POSTER SESSION 2 (P7-P12)**
TCC - Gila/Coconino/Graham/Greenlee

9:45 - Midnight **Club Consciousness 3** Leo Rich Theatre
Poetry Slam /Zombie Blues

SATURDAY April 17

8:30-10:40 am **PLENARY 10** Leo Rich Theatre
New Directions in NCC Research
*Michal Gruberger, Moran Cerf, Adrienne
Prettyman/Stephen Biggs, Anirban Bandyopadhyay*

10:40 - 11:10 am Break

11:10 am - 12:35 pm **PLENARY 11 KEYNOTE** Leo Rich Theatre
Robert J. Sawyer
Science Fiction and Consciousness

12:35 - 2:00 pm Lunch

2:00 - 4:10 pm **PLENARY 12** Leo Rich Theatre
Mindwandering and Consciousness
*Jonathan Schooler, Malia Mason,
Jonathan Smallwood*

Evening
7:30 pm till ???

End-of-Consciousness Party
Maynards at the Depot-across from
Congress Hotel

ART & INSTALLATIONS

BioScapes® - National Tour Exhibit

Now in its seventh year, the Olympus BioScapes® has sponsored a dynamic international photo competition that honors extraordinary microscope images of life science specimens captured through light microscopes, using any magnification, any illumination technique and any brand of equipment. Many of this year's winning images reflect the latest advances in neuroscience, cell biology, botany, zoology, and other sciences.

Consciousness Under the Scope

(Lucia Grossberger Morales, Abi Behar-Montefiore)

In addition to displaying images of the 2009 BioScapes® winners' tour, the Center for Consciousness Studies has prepared a looped video presentation to show at the Art & Technology Exhibit during the conference week. The video presentation will focus on images related to the TSC Conference themes (consciousness, awareness, brain, neuron, glia).

Following the Tucson TSC 2010 Conference, the Tucson display tour and video presentation will be hosted by the Arizona Health Sciences Library at the University of Arizona Health Sciences Center for a two-month display.

Meditations on Computer Patterns

(Lucia Grossberger Morales)

[Abstract 323]

ART & TECHNOLOGY DEMOS

SESSION 1

WEDNESDAY, APRIL 14

7:00 - 9:20 pm, TCC - Mohave

Chaired by Robert Pepperell, Cardiff School of Art & Design

- 7:00 - 7:20 pm **Yesterday Was a Lie**
James Kerwin
- 7:20 - 7:40 pm **The Human Hologram**
Robin Kelly
- 7:40 - 8:00 pm **The Nonlocal Quantum Hologram**
Hasmukh Taylor
- 8:00 - 8:20 pm **Human/Computer Artistic Collaboration**
Lucia Grossberger Morales
- 8:20 - 8:40 pm **The Virtual SEER**
Tonietta Walters
- 8:40 - 9:00 pm **Aperspectival Geometric Art of Adi
Da Samraj**
Gary Coates
- 9:00 - 9:20 pm **Vision Space: A New Form of Illusionary
Space**
John Jupe

SESSION 2

FRIDAY, April 16

7:00 - 9:20 pm, TCC - Mohave

Chaired by Jim Laukes

- 7:00 - 7:20 pm **Higher States of Consciousness in Sport**
Damian Vaughn
- 7:20 - 7:40 pm **Music as a Transformative Tool**
Katherine Creath
- 7:40 - 8:00 pm **Sonification in Consciousness**
Kala Perkins
- 8:00 - 8:20 pm **Music as Counterpoint to Epilepsy**
Martha Curtis
- 8:20 - 8:40 pm **Sensory Awareness and Unsymbolized
Thinking**
Russell Hurlburt
- 8:40 - 9:00 pm **Bioelectromagnetism as integrative art form**
Luis Miguel Girao

9:00 - 9:20 pm **Exploring the Relationship between
Consciousness and Virtual Reality**
Brian Betz

EXPERIENTIAL SESSIONS

Conference ID (*no charge*)
Hotel Arizona (HA)

Guided Meditation / PRANAHUTI

Tuesday, April 13	8:30 - 9:15 pm	HA - Ocotillo Room
Wednesday, April 14	7:30 - 8:30 am	HA - Ocotillo Room
Thursday, April 15	7:30 - 8:30 am	HA - Ocotillo Room

Yoga Asanas

Thursday, April 15	7:30 - 8:30 am	HA - Starlight Ballroom
Thursday, April 15	4:15 - 5:15 pm	HA - Starlight Ballroom
Friday, April 16	7:30 - 8:30 am	HA - Starlight Ballroom
Saturday, April 17	7:30 - 8:30 am	HA - Starlight Ballroom
Saturday, April 17	4:15 - 5:15 pm	HA - Starlight Ballroom

CLUB CONSCIOUSNESS

2010 - TSC - LATE NIGHT - CLUB CONSCIOUSNESS
Leo Rich Theatre

CLUB 1 Tuesday, April 13

9:45 pm Robin Kelly, The Human Antenna
10:00 pm Jeff Warren, Wheel of Consciousness

CLUB 2 Wednesday, April 14

9:45 pm Vanda Mikoloski, Enlighten Up!
10:15 pm Chase Masterson, Song Stylings from
Star Trek

CLUB 3 Friday, April 16

9:45 pm Máighréad Medbh, Twelve Beds for the
Dreamer
10:00 pm Poetry Slam/Zombie Blues/Club Band:
Fort Awesome

TSC 2010 PRE-CONFERENCE WORKSHOPS

Registration: TCC Lobby

MONDAY, April 12 • 9:00 am - 6:00 pm

TCC Meeting Rooms

Pre-Conference Workshops

Session 1, Session 2

TUESDAY, April 13 • 9:00 am - 1:00 pm

TCC Meeting Rooms

Pre-Conference Workshops

Session 3

SESSION 1 – WORKSHOPS

Monday, April 12 (9:00 am - 1:00 pm)

Tucson Convention Center (TCC) and Hotel Arizona (HA)

-
- | | | |
|----|--|----------------|
| 1 | Selective Attention
<i>Christof Koch, Jeroen van Boxtel</i> | TCC - Maricopa |
| 2 | Lucid Dreaming
Stephen LaBerge | TCC - Mohave |
| 3 | Biofeedback and Mindfulness
<i>Keya Maitra, Connie Schrader</i> | TCC - Coconino |
| 4a | Transforming Consciousness
<i>Stanley Krippner, Frank Echenhofer et al, Part 1</i> | TCC - Graham |
| 5a | Psychedelics in the Mainstream
<i>Thomas B. Roberts, James Fadiman, Part 1</i> | TCC - Greenlee |

SESSION 2 – WORKSHOPS

Monday, April 12 (2:00 pm - 6:00 pm)

Tucson Convention Center (TCC) and Hotel Arizona (HA)

-
- | | | |
|---|---|-------------------------|
| 6 | Neuroimaging of Meditation
<i>David Hubbard, Alarik Arenander</i> | TCC - Maricopa |
| 7 | Neural Basis of Repression and Dissociation
<i>Heather Berlin, Michael Anderson</i> | TCC - Coconino |
| 8 | Yoga Asanas
<i>Siegried Bleher</i> | HA - Starlight Ballroom |

- 9a **Update on Microtubules and Quantum Biology** TCC - Mohave
Stuart Hameroff, Jack Tuszynski et al, Part 1
- 4b **Transforming Consciousness** TCC - Graham
Stanley Krippner, Frank Echenhofer et al, Part 2
- 5b **Psychedelics in the Mainstream** TCC - Greenlee
Thomas B. Roberts, James Fadiman, Part 2
- 10a **A Victorian's Guide to Consciousness** HA - Grand
Pim van Lommel, Gary E. Schwartz Ballroom West et al, Part 1

SESSION 3 – WORKSHOPS

Tuesday, April 13 (9:00 am - 1:00 pm)

Tucson Convention Center (TCC) and Hotel Arizona (HA)

- 11 **Global Broadcasting in the Brain** TCC - Maricopa
Bernard J. Baars, Katharine A. McGovern
- 12 **Why Synesthesia Matters** TCC - Gila
Sean Day, Patricia Lynne Duffy et al
- 13 **Experimenting with Endogenic Experience** TCC - Coconino
Talma Hendler, Abraham Zangen et al
- 9b **Update on Microtubules and Quantum Biology** TCC - Mohave
Stuart Hameroff, Jack Tuszynski et al, Part 2
- 14 **Philosophical Theories of Consciousness** TCC - Greenlee
Joshua Weisberg, Uriah Kriegel
- 15 **Imperience: Self-transformation Pranahuti Meditation** HA - Starlight
Ballroom
K. Madhava, K. Mannur et al
- 10b **A Victorian's Guide to Consciousness** HA - Grand
Ballroom West
Pim van Lommel, Gary E. Schwartz et al, Part 2

USING THE PROGRAM BOOK

Individual papers will be found in the abstracts section (p. 38) under the most relevant classification heading and also cross referenced under additional headings. The bold codes at the end of each abstract – e.g. C2 – refer to the program itself (indicating that this paper will appear in Concurrent Session 2. The Poster Sessions are categorized first by Section / Session.... P1-P6 belong to Poster Session A on Wednesday evening; P7-12 belong to Poster Session B on Friday evening. Presenting authors are listed in the Program; all contributing authors are listed in the Abstracts. There is an author index on p. 226.

POSTER SESSION A = P1 - P6

- P1 Philosophy
- P2 Neuroscience
- P3 Cognitive Science and Psychology
- P4 Physical and Biological Sciences
- P5 Experiential Approaches
- P6 Culture and Humanities

POSTER SESSION B = P7 - P12

- P7 Philosophy
- P8 Neuroscience
- P9 Cognitive Science and Psychology
- P10 Physical and Biological Sciences
- P11 Experiential Approaches
- P12 Culture and Humanities

CONFERENCE PROGRAM

Tuesday, April 13, 2010

CONFERENCE OPENING

1:45 - 2:00 pm, Leo Rich Theatre

PLENARY 1

2:00 - 4:10 pm, Leo Rich Theatre

PL1 William James Centennial

Eugene Taylor, Could Radical Empiricism Guide

Neurophenomenology as the Future of Neuroscience? [59]

Bernard J. Baars, How William James Accidentally Created
Behaviorism [1]

Bruce Mangan, James in the 21st Century [173]

CONCURRENT SESSIONS C1-C7

4:30 - 6:30 pm, Tucson Convention Center (TCC) / Hotel Arizona (HA)

C1 Consciousness, Representation, and Thought

TCC - Coconino

John Spackman, Conceptualism and the Richness of Perceptual
Content [91]

Bernard W. Kobes, The Reflexive Nature of Consciousness and
Anti-Individualism [87]

David Pitt, The Paraphenomenal Hypothesis [89]

Philip Goff, Does Mary Know I Mean Plus Rather Than Quus?
[85]

Berit Brogaard, What is an Unconscious Mental State? [81]

C2 Materialism, Dualism, and Higher-Order Thought

TCC - Gila

Josh Weisberg, The Zombie's Cogito: Meditations on Type-Q
Materialism [25]

Bernard Molyneux, Dualism Without the Usual Problems: An
Introduction to Soft-Interactionism [22]

Brian Fiala, Taking the Edge Off Type-A Materialism [19]

Rocco Gennaro, Conceptualism and HOT Theory [50]

Alex Kiefer, The Epistemic Status of the Transitivity Principle in
Higher-Order Theories of Consciousness [51]

C3 Neurobiology and Theories of Consciousness: Brain Networks

TCC - Maricopa

Zoran Josipovic, Influence of Nondual Awareness on

Anti-Correlated Networks in the Brain [111]

Giedrius Buracas, Consciousness as Validation of Prediction by Attention [103]

Erhard Bieberich, The Hypersite Model of Electrofractal Consciousness and the Search for “Bright Matter” [133]

Eduard Alto, Inversion of the Retinal Layers as Necessary Condition for Spatial Constancy [119]

Kevin Brown, A Systems Model for Selectivity Between Default and Task Modes [146]

C4 *Unconscious Processes*

TCC - Graham

Jerome Daltrozzo, The N400 and LPC Effects Reflect Controlled but not Automatic Mechanisms of Sentence Processing: An ERP Study to Auditory Sentences with Varying Levels of Acoustic Degradation [107]

Anastasia Gorbunova, Unconscious Processes in Visual Word Recognition: Evaluating Visual Masking [170]

Myoung Ju Shin, A Dissociation Between Non-Conscious Orienting and Conscious Perception of Peripheral Visual Objects [178]

Peter Walling, Dynamical Correlates of Consciousness During Evolution, and Emergence from General Anesthesia: An Explanation of the “Conscious Moment” [245]

Vince Polito, Hypnotic Alterations of the Sense of Agency [207]

C5 *AI and Computational Models*

TCC - Greenlee

Alexei Samsonovich, A Metacognitive Architecture That Supports Human-Like Learning [199]

Peter Ford Dominey, When is a Robot Conscious? [186]

David Pearce, Quantum Computing: The First 540 Million Years [224]

Oded Maimon, The Alien Pure Consciousness (APC) problem [37]

Thomas Benda, Minds, Machines, and Lucas-Penrose [30]

C6 *Art, Media and Conscious Perception*

HA - Grand Ballroom West

Robert Pepperell, Art, Indeterminacy and Consciousness [327]

James Kerwin, The Intersection of Art and Science in Cinema: “Yesterday Was A Lie” [326]

Kristopher Patten, The Harmonics of Hades [160]

Carol Steen, Do You See What I See: Commonalities in Synesthetic Art [328]

Hein Van Schie, Controlling Your Body from an Out-of-Body Perspective Impairs Movements of Contralateral Body-Parts and Reduces Sensation and Proprioception [125]

C7 *Altered States of Consciousness*

HA - Grand Ballroom East

Matthew Baggott, Effects of the Psychedelic 3,4-Methylenedioxyamphetamine (MDA) in Humans [138]

Keith Turausky, Visions of Quantum Superposition in William James' "Subjective Effects of Nitrous Oxide" [293]

Christina Lavallee, QEEG, Mood and Personality Profiles of Novice and Experienced Meditators in Conditions of Meditation Only, Meditation with Facilitative Binaural Beats and Meditation with Hindering Binaural Beats [282]

Thomas Roberts, You Teach What! Where? A University Course on Psychedelics [212]

Elaine Perry, From 'Plants of the Gods' to Shamanic Consciousness [292]

WELCOME RECEPTION

7:00 - 9:30 pm, Hotel Arizona - Courtyard/Starlight Ballroom
Light food and drinks

CLUB CONSCIOUSNESS 1

9:45 - 11:15 pm, Leo Rich Theatre

Wednesday 14, 2010

ART & MEDIA INSTALLATIONS

BioScapes® - National Tour Exhibit and Consciousness Under the Scope

Available Wednesday - Saturday
TCC - Apache/Cochise

PLENARY 2

8:30 - 10:40 am, Leo Rich Theatre

PL2 *Keynote*

Marcus E. Raichle, Brain Dark Energy and Default Mode Networks [113]

Robert G. Shulman, Baseline Brain Energy Supports the State of Consciousness [114]

PLENARY 3

11:10 am - 12:35 pm, Leo Rich Theatre

PL3 *Bodily Awareness***H. Henrik Ehrsson**, Two Legs, Two Arms, One Head.

Who am I? [145]

Frédérique De Vignemont, A Mosquito Bite Against the

Enactive View of Bodily Experiences [96]

PLENARY 4

2:00 - 4:10 pm, Leo Rich Theatre

PL4 *Computational Models of Consciousness***Dharmendra S. Modha**, Network Architecture of the White Matter Pathways in the Macaque Brain [149]**Ben Goertzel**, Moving Bubbles of Attention: A Mechanism

Enabling the Emergence of Self and Focused Consciousness in Embodied Artificial General Intelligences [187]

Marc Ebner, A Computational Model for a Mobile Zone of

Synchrony Mediating Consciousness [109]

CONCURRENT SESSIONS C8-C14

4:30 - 6:35 pm, Tucson Convention Center (TCC) / Hotel Arizona (HA)

C8 *Introspection*

TCC - Maricopa

Terry Horgan, Introspection about Phenomenal Consciousness:

Running the Gamut from Infallibility to Impotence [97]

Eric Schwitzgebel, Introspection, What? [57]**Charles Siewert**, Attention, Introspection and Inner Sense [100]**William Adams**, Avoiding The Perceptual Model of Introspection [53]**Maja Spener**, Introspective Methodologies in the Science of Consciousness [58]**C9** *Panpsychism and Epiphenomenalism*

TCC - Mohave

Godehard Bruentrup, Intrinsic Properties and Panpsychism [7]**Alexander J. Buck**, Does Panexperientialistic Holism Solve the Combination Problem? [8]**William Seager**, Rescuing Panpsychism from the Emergence Argument [13]**William S. Robinson**, Phenomenal Realist Physicalism Implies Coherency of Epiphenomenalist Meaning [23]**Bill Faw**, How EPI are Phenomena: Velmans, Robinson, Dennett and Others [41]

C10 *Phenomenology and First-Person Approaches*

HA - Cholla

Chris Heavey, Some Characteristics of Feelings [165]**Christian Coseru**, The View from Everywhere: Consciousness, Intentionality, and Naturalized Phenomenology [83]**Urban Kordes**, Phenomenology of decision making [268]**Michael Mrazek**, Staying on Track: Mindful Breathing Reduces Mind-Wandering [157]**William Gomes**, Self-Consciousness and Kinaesthetic Perceptual Ambiguity: A Phenomenological Analysis of the Alien-Hand Experiment [266]**C11** *Dreaming*

HA - Manzanita

David Kahn, REM Network and Dream Consciousness [183]**Armando D'Agostino**, The Dreaming Brain/Mind, Dissociation and the Psychoses: Connecting States of Consciousness [182]**Antonio Zadra**, Disturbed Dreaming: How Everyday Dreams Turn into Nightmares [185]**Miloslava Kozmova**, The Phenomenon of Nocturnal Cognitive Problem-Solving [184]**Jayne Gackenbach**, Video Game Play and Lucid Dreaming as Socially Constructed Meditative Absorption [303]**C12** *Neural Correlates of Consciousness*

HA - Ocotillo

David Hubbard, Neuroimaging of Meditation: Imaging Meditation and fMRI Analysis of Transcendental Meditation [278]**Nancy A Craigmyle**, Meditation May Optimize Attention and Behavior in the Changing Environments of the Present Moment by Activating the Cortical Salience-Detecting Frontoparietal Control Network [106]**Julia Mossbridge**, Disparate Heart Rate Changes Precede Correct vs. Incorrect Guesses [230]**Tomer Fekete**, Quantifying the Richness of Phenomenal Experience [143]**David Saunders**, A New Paradigm of Vision: 40Hz Coherence in Amacrine Cells. Microsaccade Drift/Tremors and Visual Illusions [120]**C13** *Quantum and Subcellular Approaches*

Leo Rich Theatre

Hartmut Neven, What Could a Brain do with Quantum Algorithms? [188]

Giuseppe Castagnoli, Quantum Computation and the Physical Computation Level of Consciousness [218]

Satyajit Sahu, Microtubule as a Universal Fourth Circuit Element [247]

Nancy Wolf, Nanoneuroscience and Neuropharmacology: Implications for Quantum Mind Theories [227]

Travis Craddock, 'Memory Bytes' - A Molecular Match for Activated CaMKII Encoding Microtubule Lattices [126]

C14 *Contemplative, Spiritual and Religious Approaches*

HA - Grand Ballroom West

Stanley Klein, Similarities Between the Hard Problems of Qualia and of God [335]

Cody Bahir, Zen's Civil War over the Definability of Consciousness: Medieval Asian Roots of Contemporary Conceptions of Consciousness [2]

Keya Maitra, Mindfulness, Anatman, and the Possibility of a Feminist Self-consciousness [314]

Maureen Seaberg, Why Synthesia Matters: Spirituality [336]

Sastry Bhamidipati, Experiences of Non-Ordinary States of Consciousness in Pranahuti Aided Meditation and Psycho-Spiritual-Behavioral Transformation: A Phenomenological Study [273]

ART & TECHNOLOGY DEMOS 1

7:00 - 9:20 pm, TCC - Mohave/Maricopa

Exploring Consciousness with Art & Technology

James Kerwin, The Intersection of Art and Science in Cinema: "Yesterday Was A Lie" [326]

Robin Kelly, The Human Hologram [262]

Hasmukh Taylor, The Living Nonlocal Quantum Hologram: The Recording and the Viewing of Nonlocal QH Explained, and Focuses on the Relationships and Dynamic Exchanges Between Consciousness and Awareness [242]

Lucia Grossberger Morales, A Human/Computer Artistic Collaboration Using Patterns to Generate Abstract, Spiritual "Paintings" [323]

Tonietta Walters, The Virtual SEER [Self Extension and Experience Realization] in Phenomenological Self Exploration within the Creative Process [329]

Gary Coates, Transcendental Realism: An Introduction to the Nondual, Aperspectival Geometric Art of Adi Da Samraj [320]

John Jupe, Vision-Space: A New Form of Illusionary Space [325]

ART & MEDIA INSTALLATIONS

7:00 - 9:00 pm, TCC - Apache/Cochise

Under the Scope/BioScapes®/Meditations on Computer Patterns

POSTER SESSION A, SECTIONS P1-P6

7:00 - 9:45 pm, TCC - Greenlee, Graham, Coconino, Gila

P1 *Philosophy***J. Kenneth Arnette**, Intersubjectivity: The Key to the New Science of Consciousness [54]**Bill Baird**, The Physics and Neuroscience of the Role of Consciousness in Creativity and Psychological/Spiritual Development [40]**Dave Beisecker**, Uniting “Hard-To-Classify” Responses to the Conceivability Argument Against Materialism [17]**Jacob Berger**, Fodor and the Structure of Iconic Representations [80]**Rudy Bernard**, Consciousness and the Making of Reality [5]**Peng Chien**, An Argument Against the Ability Hypothesis [26]**Allan Combs**, It’s All in Peirce! Modern Theories of Consciousness Were Prefigured in Peirce’s Tripartite Logic [82]**Alexandra Elbakyan**, Consciousness in Mixed Systems: Merging Artificial and Biological Minds Via Brain-Machine Interface [32]**Paul Evans**, Consciousness And The Technological Demiurge [33]**Brandon Fenton**, Epiphenomenalism Meets Qualia in Practical Deliberation and Action: Seeing Isn’t Believing? [27]**Jason Ford**, Defending “Consciousness, Self and Attention” [49]**Mathew Gendle**, Beauregard and the “New” Dualism: An Emergentist Response [20]**Jorge Gonçalves**, The Early Stages of Life and the Problem of the Self [65]**Amir Horowitz**, Phenomenal Externalism and Self-Knowledge [86]**Weisiang Huang**, Can Freely Voluntary Acts Appear Without Micro-Determinism? [76]**William H Kautz**, Is a Science of Consciousness Possible? Limitations, Doubts and Opportunities [55]**Kuo Ling-Fang**, Still Being Some One [67]**Jenyu Liu**, The Human Mind May be a Turing-Machine-Like System Even If the Lucas-Penrose Argument is Right [42]**Gaylen Moore**, From Chaos to Qualia: An Analysis of

- Phenomenal Character in Light of Process Philosophy and Self-Organizing Systems [29]
- Colin Morrison**, Identifying the Most Likely Explanation of Consciousness (Part 1): IBM and The SCALP Method [46]
- Joel Parthemore**, The Hard Problem of Concepts IS the Problem of Experience [47]
- Matthew Piper**, Complexity Theories of Consciousness [11]
- Robert Pusakulich**, Avoiding the Ontologic Explanatory Gap [48]
- David Scharf**, A Critique of Jaegwon Kim's Physicalism: An Implicit Argument for a Non-Cartesian Interactionism [24]
- George Seli**, Felt Agency and the Consistency Criterion [78]
- Robert M. Wallace**, Greater Reality Achieved Through Consciousness: An Unrecognized Option (Plato/Hegel) in the Philosophy of Mind [15]
- Robert Ware**, A Set-Theoretic Model of Consciousness: The Structure of Self-consciousness as a Natural Solution for the Logical Antinomies [71]
- Rex Welshon**, Heautoscopy, Out-of-Body Experience and the Subjective Perspectivity of Conscious Experience [72]

P2 *Neuroscience*

- Uziel Awret**, Christopher Badcock's "The Imprinted Brain" and the Brain's Default System [128]
- Bruce Carruthers**, The Primacy of Proprioception- A Thesis Derived from Evolutionary, Neurological, Neuropathological, Clinical, Robotic Design and Philosophical Considerations [122]
- Michael Cerullo**, Tononi's Integrated Information Theory is Inconsistent with Chalmers' Principle of Organizational Invariance [105]
- Gabriel Mograbi**, Neural Basis of Decision-Making and Assessment: Self-Control, Will and William James [123]
- Anatoly Nichvoloda**, Information Theoretic Model of Action Awareness [124]
- James Clement Van Pelt**, Beyond the Binding Problem: Toward an Experiential Model of Nested Binding Levels to Integrate the Components of Experience [141]

P3 *Cognitive Science & Psychology*

- Carlos Acosta**, On the Theoretical Generation of Antinomies and Paradoxes [194]
- Ben Baird**, Where does the mind wander? A quantitative exploration of the content of stimulus independent thought [153]

- Richard Blum**, The Architecture of the Mind - Toward a Cognitive Model. Or, the Mind is Not the Brain, the Mind is Software Operating the Brain [195]
- Peter Burton**, Human Consciousness, in Control of Human Cognition, Develops Coherently with Modified Cognitive Representation as Domain Mastery Progresses: So Elegance, Efficiency & Effectiveness Improves [196]
- Scott Clifton**, What's in a Feeling? An Argument for the Intentionality of Affect [164]
- Kristen Corman**, Motor Recruitment of Mirror Neuron Areas During REM Dreams: Performing Artists, Mirror-Practiced, Limb Motions [181]
- Mark Engelbert**, The Role of Affect in Self-Attribution [203]
- Arthur Hastings**, Creative Problem Solving with Possible Facilitation of Nonconscious Thought [172]
- Frank Heile**, Evidence for Two Conscious Entities in the Human Brain [205]
- Michael Lipkind**, Analysis of the Spatial-Temporal Organization of Episodic Memory Based on Irreducible Field Principle [163]
- Ted Loughheed**, Immunity to Error Through Misidentification and Non-Ascriptive Reference to Self [206]
- Alain Morin**, Inner Speech: A Neglected Phenomenon [166]
- John Selden**, The Role of Consciousness, Automaticity, and Stimulus-Independent Thought in Deductive Reasoning [177]
- Richard Sieb**, Consciousness and the Production of Voluntary Action [179]
- Paul Storey**, A Definition of Consciousness as Energy Carrying Information Flowing Through Control Loops in a Hierarchy Constituting the Self [189]
- Vicky Suri**, Cognitive Architecture for Pranitic Practices as Applied to Conscious [200]
- Bert Timmermans**, If You Want to Know What People Saw, Just Ask Them What They Saw [180]
- P4** *Physical & Biological Sciences*
- Nyles Bauer**, Can General Rules Observed in Our Universe Help Us to Understand the Nature of Consciousness? [232]
- James Beichler**, Microtubule Coherence in the Brain: The Electromagnetic Source of Memory [229]
- Siegfried Bleher**, Mechanism for Transcendence in Consciousness [234]
- Brad Buhr**, Evolutionary and Social Constraints on First Person Phenomenology [250]

- Jeannine Davies**, Topology of the Mereological Infinite: Modeling Human Resonance as Social Networks [235]
- Ross Grumet**, The Effect of Psychiatric Medication on Consciousness: A Survey of 100 Patients Who Have Started, Stopped and Restarted Medication [261]
- Alex Hankey**, Self Observing Quantum System Models of Body, Mind and Soul [219]
- Stanley Jungleib**, Systems and Methods for Analyzing and Affecting Subtle Energy [Patent Pending] [246]
- Walter Matreyek**, Cybernetics-Based Stages/Levels of Life/Consciousness: Towards an Emerging Scientific Spirituality [255]
- Christophe Menant**, Evolutionary Advantages of Intersubjectivity and Self-Consciousness Through Improvements of Action Programs [257]
- Donald Padelford**, Consciousness in Evolution – Sketch for a New Model [244]
- Marta Sananes**, On Liminal and Superluminal Conscious Entities: An Imagination [239]
- Thomas Schumann**, Quantum Calculation of Probability from Complex Probability Amplitudes Using the Metabrain Model [226]
- Richard Shank**, A Theory of Consciousness Based on the Standard Model of Particle Physics and Neuroscience Concepts, and Embodies Interactionism, Dualism and Physicalism [240]
- John Yates**, The A Series, Time and Free Will [231]

P5 *Experiential*

- John Astin**, The Discovery of Awareness - A Qualitative Study [263]
- Samuel Breidenbach**, Shamanic States of Consciousness Compliment Transpersonal Psychology On Spiritual Emergency and Avoid Hospitalization [289]
- Estelle Campenni**, Cultivating Mindfulness Through Contemplative Creativity [275]
- Vibhas Chandra**, The Consciousness Conglomerate: Eastern Insights and Scientific Revalidation [276]
- Ingrid Fredriksson**, Consciousness - Forever [311]
- P David Glanzer**, The Consciousness of Bodily Felt Sense in Focusing (Gendlin): An Adaptive Resonance Theory (Grossberg) Account with Application to Experiential Psychotherapy [299]
- Ivan M. Havel**, Uniqueness of Episodic Experience [267]
- Reginald Humphreys**, Sympathetic Nervous System

Augmentations of Consciousness Using “Third-Eye” Hypnosis [290]

Brock Kilbourne, Posttraumatic Stress Disorder Onset and Altered State of Consciousness Symptoms [291]

Joel Krueger, (We-)Space is the Place: Extended Cognition and Social Interaction [269]

Laurel McCormick, Ground-Breaking Qualitative Research Method: Intuitive Inquiry Embedded With Grounded Theory [295]

Rebecca Merz, Transformations of Bereavement in a Psychomanteum Process: Qualities of Meaning and Paths of Change [296]

Lesley Roy, When Realities Collide: A Methodology for the Systematic Study of Synchronistic Phenomena [308]

Madhu Sameer, Dissociation as a consciousness oriented phenomenon: A blessing or a curse? [302]

Joana Serrado, Anxious Consciousness: Anxiousness the Mystical Portuguese Writings of Joanna de Jesus (1620-1680) [286]

Jonathan Shear, Meditation as First-Person Methodology? Serious Promise, Serious Problems [287]

Karen Studd, The Consciousness of Movement [315]

Wandan (Wendy) Zeng, Purification of Consciousness through the Exercise of Will Power in Pranahuti Aided Meditation: A Phenomenological Study of its Effectiveness [288]

P6 Culture & Humanities

Nildson Alvares Muniz, Consciousness, Language and Symbolic Thought in Albert Einstein’s Relative Space-Time: New Inter-Disciplinary Perspectives in Einstein’s Mechanics of Relativity [338]

Johnathan Bown, Mindfulness and Video Game Play: A Preliminary Inquiry [340]

Lurleen Brinkman, Consciousness and Human Rights: Preservation and Protection of Consciousness-Based Technologies of Indigenous Peoples [341]

Jack Friedland, How the Myths of God and Mind Emerged from the Evolution of Internal Communication [334]

Natalie Geld, Building Better Human Beings from the First Flickering of Consciousness. Activating mastery of art & science of being human - Learning to lift the skirt of consciousness & take advantage of yourself. [343]

Jon Goodbun, Empathising with Gregory Bateson: Ecologies of the Extended Mind [322]

Alexander Jon Graur, Think a Song! Brain, Mind,
Consciousness-the Musician's Way [332]

Chao-Huei Laii, Disease Consciousness, Illness Consciousness
and The Behavior or Actions Taking Medical Treatment of
The Prostitute in Bei-tou [337]

Peter Reynolds, Did Mirrors Cause Consciousness? [344]

Brandi Whitemyer, Exploring the Relationship between
Affective Response, Psychological Presence and the Aesthetic
Experience in a Virtual Environment [330]

CLUB CONSCIOUSNESS 2

9:45 - 11:15 pm, Leo Rich Theatre

Thursday, April 15, 2010

PLENARY 5

8:30 - 11:00 am, Leo Rich Theatre

PL5 *Multimodal Experience*

Patricia Lynne Duffy, What is it Like to Experience Synesthesia
and What Might it Mean? [305]

Barry E. Stein, An Unconscious Neural Strategy Synthesizes
Information from Different Senses, Creates a Coherent Picture
of External Events, and Executes Adaptive Behaviors [116]

Casey O'Callaghan, Varieties of Multimodal Experience [98]

Michael Proulx, Synthetic and Natural Crossmodal Mappings
Explored with Sensory Substitution [161]

PLENARY 6

11:30 am - 12:50 pm, Leo Rich Theatre

PL6 *Keynote*

David Chalmers, The Singularity: A Philosophical Analysis [31]

THURSDAY AFTERNOON FREE – SIDE TRIPS

CONFERENCE DINNER

6:30 - 10:30 pm, Westin La Paloma Resort & Hotel
(*ticket/reservation required*)

Friday, April 16

PLENARY 7

8:30 - 10:40 am, Leo Rich Theatre

PL7 *Transformation of Consciousness*

Cassandra Vieten, Transformations in Consciousness through Spiritual Engagement [297]

Jeffrey A. Martin, Empirically Testing Purported Claims of Enlightenment Using Standard Psychological Methods and Instruments [169]

Za Choeje Rinpoche, Tibetan Buddhist Perspective on Consciousness, Enlightenment and Reincarnation [285]

PLENARY 8

11:10 am - 12:35 pm, Leo Rich Theatre

PL8 *Keynote*

Antonio Damasio, The Neural Self [108]

PLENARY 9

2:00 - 4:10 pm, Leo Rich Theatre

PL9 *Theories of Consciousness*

Sid Kouider, Neurocognitive Theories of Consciousness: a Critical Overview [112]

Robert Van Gulick, "Toward a More Perfect Union" - The Prospects for Integrating Diverse Theories of Consciousness [101]

Galen Strawson, A Metaphysics for Panpsychism [14]

CONCURRENT SESSIONS C15-C21

4:30 - 6:35 pm, Tucson Convention Center (TCC) / Hotel Arizona (HA)

C15 *Consciousness and the Self*

TCC - Maricopa

Rita Carter, The Multiple Self: Dissociation in Normal Self-Identity [63]

Kenneth Williford, Consciousness and Its Selves: Subjectivity and the Autobiographical Ego [73]

Miri Albahari, Can Meditation Non-Pathologically Dismantle the 'Core Self'? [271]

Wolfgang Fasching, The Presence of Experience and the Experience of Presence [64]

David Woodruff Smith, Is Reflexive Inner Awareness a Form of Representation? [208]

C16 *Ontology of Perception*

TCC - Mohave

Jonathan Bricklin, William James's Veridical Revelation [6]**Leopold Stubenberg**, Seeing Things Outside the Head [93]**Enrico Grube**, In Defense of Diachronic Perceptual Atomism [210]**Susanna Siegel**, When are the Contents of Experience Multitmodal? [90]**Riccardo Manzotti**, The Spread Mind: Is Phenomenal Experience Identical with Physical Processes Larger Than Those Taking Place Inside the Nervous System? A Defense of Process Phenomenal Externalism [10]**C17 *Neurobiology and Theories of Consciousness: Foundations***

Leo Rich Theatre

Benjamin D. Young, The Phenomenal Element [102]**Benjamin Kozuch**, Prefrontal Lesion Studies Cast Doubt on Higher-Order Theories of Consciousness [52]**Eric Larock**, How are Synchrony and Suppression Related to Conscious Experience? [139]**Justin Sytsma**, Searching for Evidence of Phenomenal Consciousness in NCC Research [117]**Joy CY Hung**, The Detectable Consciousness [3]**C18 *Psychotherapy and Transformation***

HA - Cholla

Donald Mender, Post-Classical Phase Transitions and Emergence in Psychiatry: Beyond Engel's Biopsychosocial Model of Psychopathology [307]**Michael Johnson**, A Randomized Study of a Brief Novel Zen Dialogue Method For Rapid Induction of "Kensho Experience" with Enhancement of Mindfulness and Well Being Parameters [279]**Mark Thurston**, A Developmental Model of Volition for Personal Transformation [79]**Daniel Beal**, Placebo Response and Consciousness [260]**Madhava Kotagiri**, Taming the Disturbed Mind - A Revolutionary New Method [281]**C19 *Mind-Wandering***

TCC - Ocotillo

Xiao-Lan Song, Mind-Wandering in Daily Life: An Experience-Sampling Study [211]**Włodzimirz Klonowski**, Mind Wandering - Feelings and Thoughts [129]

Michael Franklin, Behavioral Indices of Mind-Wandering While Reading [155]

Jules Troyer, Situation and Self: The Case of the Wandering Mind [158]

Peter Langland-Hassan, Imagination and the Psychology of Mind-Wandering [197]

C20 *Evolution of Consciousness*

TCC - Grand Ballroom West

James Beran, If Birds Have Conscious Experiences, Do Fish Too? [249]

Brian McVeigh, Why Did the Unconsciousness Appear in History When It Did? A Jaynesian Explanation [174]

Carole Brooks Platt, Voices from the Other Side: Neuroscience, Attachment Theory and the Creative Self [132]

Michael McBeath, A Dynamic, Topographic, Natural-Selection Fitness Representation and the Evolution of Conscious Awareness as a Mechanism for Rapid Plastic Adaptation [256]

Laurence J. Victor, Mammalian Origins for Human Consciousness [259]

C21 *Nonlocal and Anomalous Phenomena*

TCC - Grand Ballroom East

Gary Schwartz, Effects of Individual and Group Distant Healing Intentions on Patterns of Cosmic Rays [312]

Pim van Lommel, Nonlocal Consciousness: A Concept Based on Scientific Studies on Near-Death Experience [309]

Mark Boccuzzi, Old Dog, New Trick: The Effect of Animal Micro-Psychokinesis on Quantum Events [310]

Julie Beischel, PhD, A Phenomenological Pathway to an Empirically Driven Distinction Between Survival Psi and Somatic Psi by Research Mediums [264]

Arnaud Delorme, Shaktipat-Related Synchronization Between Brains?: Statistical Analysis of Simultaneous High Density EEG Recordings of Shaktipat Sender and Receiver Subjects [277]

ART & TECHNOLOGY DEMOS 2

7:00 - 9:20 pm, TCC-Mohave/Maricopa

Exploring Consciousness with Art & Technology

Damian Vaughn, Exploring Higher States of Consciousness in Sport - Sport as a vehicle to understand the potential of human consciousness [294]

Katherine Creath, Music as a Transformative Tool [331]

Kala Perkins, Sonification in Cosmos and Consciousness ~ the Ontology of Resonant Properties: How sound Gives Rise to Phenomena, Transforms, Evolves and Heals [198]

Martha Curtis, Music as Counterpoint to Epilepsy [154]

Russell Hurlburt, Sensory Awareness and Unsymbolized Thinking: Videos from Descriptive Experience Sampling [214]

Luis Miguel Girao, Bioelectromagnetism as Integrative Art Form. Towards a Non-Representational Art Practice [321]

Brian Betz, Exploring the Relationship Between Consciousness and Virtual Reality [319]

ART & MEDIA INSTALLATIONS

7:00 - 9:00, TCC - Apache/Cochise

Under the Scope/BioScapes®/Meditations on Computer Patterns

Poster Session B, Sections P7-12

7:00 - 9:45 pm, TCC - Greenlee, Graham, Coconino, Gila

P7 *Philosophy*

Brent Allsop, Scientific Consensus: The Importance of Measuring For and Methods For Tracking Such [95]

Anna Bortolan, The Role of Affects in the Constitution of Pre-Reflective Self-Consciousness: How Current Approaches to the Study of Self-Awareness Could Be Integrated [62]

Noel Boyle, Jackson Has Been Wrong All Along [18]

Michael Brill, How the 162 Basic Patterns of the Human Personality Matrix Reflect Free Will and Are the Catalysts for Health Issues [75]

Stephen Deiss, The Hard Problem and a Possible Solution [43]

Melissa Ebbers, How to be Judgmental: On the Need for a Two-Dimensional Account of Content [84]

Horace Fairlamb, Would James Buy Dennett's Conscious Robot? [34]

Machiko Fujiwara, A Computer Program that has its Subjective Views [35]

Shun-Pin Hsu, Self and Transparency [66]

Tam Hunt, Kicking the Psychophysical Laws into Gear: A Single Aspect Theory of Information, Part I [44]

Kenzo Iwama, Knowledge Argument on the Basis of Our Computer Program [36]

Morey Kitzman, We Will Know What We Are Looking For When We Find It [56]

Chia-Hua Lin, From the Self-Awareness to the Other Minds [88]

Ying-Tung Lin, Mary, No Pain, No Gain [28]

Pete Mandik, Fine-Grained Supervenience [21]

- Robert Mays**, A Theory of Mind-and-Brain that Solves the “Hard Problem” [45]
- Rajakishore Nath**, A Critique on Artificial Intelligence Model of Mind [38]
- Anthony Peressini**, Applying Dynamical Systems Theory to the Problem of Conscious Intentional Action [77]
- Jonathan S Powell**, A Singular Resolution to the Combination Problem [12]
- Christopher Richards**, Color Content, Semantics, and Error Theories [68]
- T. Bradley Richards**, Consciousness, Access and Phenomenal Overflow: A Reply to Block [69]
- Juan Tomas Rodriguez-Colon**, Theory of Consciousness and the Self. What was in the Mind of Marx, Freud and Einstein When They Conceived Their Respective Theories? [70]
- Sunita Singh Sengupta**, The Science of Mind: Vedantic Perspectives [99]
- Pierre Steiner**, What Role for the Brain in Vehicle-Externalist Theories of Perceptual Experience? [92]
- John Strozier**, A Logical Model of the Brain and Consciousness [39]
- Zoltan Veres**, An Auto-Theoretic Model of Consciousness [94]
- Burton Voorhees**, Toward a Scientific Approach to First Person Reports [60]
- Laura Weed**, A Relational Account of Perception [61]
- Gary Williams**, What is it Like to be Unconscious? [4]
- Jerry Yang**, Self-Representation and Kant’s Transcendental Self-consciousness [74]
- Xinyan Zhang**, A Neutral Monism’s Theory of Mind and Matter [16]

P8 *Neuroscience*

- Adam Crane**, The NQUIET (Neuronal Quantum Information and Energy Transduction) Hypothesis An International MindFitness Foundation Initiative [135]
- Stuart Hameroff**, Clarifying the Qubit - Response to recent attack against Penrose-Hameroff ORCH OR [134]
- Leon Hardy**, Neurohydrodynamics: a Window for Conscious Cognition [147]
- Russell Hebert**, An EEG Quantum Model of Consciousness [136]
- Scott Jackson**, Abstract and Imaginary Sense Data [9]
- Pardeep Kumar**, Anti-Aging and Neuroprotective Effect of Estradiol in Aging Female Rat Brain [130]
- Eugene Ledezma**, Have You Ever Thought that Memory is Not Inside Your Brain? [127]
- Nathan Munn**, Self Evidence: Cognitive Neuroscience and Consciousness as a Variable [131]

- James Pagel**, The Neurochemical Switch (GABA) That Turns Off Conscious Thought [144]
- Jordan Peterson**, The Frames of Consciousness: The Role of Motivation and Emotion [150]
- Peter Raulefs**, A Computational Model of Emotions: Anxiety and Fear [142]
- Jesper Ronager**, The Biochronos Theory: All Cells Possess a Core of Electrons in an Unobserved Quantum State Residing in the Intraluminal Vacuum of Tubular Proteins of the Cytoskeleton [137]
- Francis Schwanauer**, No Synchrony Below $N+1$: The Sum of the (Parent and Daughter Particles As) Members of a Self-Inclusive Set [140]
- Kunjumon Vadakkan**, Framework of Consciousness from the Semblance Hypothesis of Memory [118]
- Anders Wallenbeck**, Explicit Description of the Mind-Body Problem by Autonomous Neural Signals [152]

P9 *Cognitive Science & Psychology*

- Joel Alexander**, The Effects of a Self-Evaluation Task on the P300 Event Related Potential [201]
- Amna Alfaki**, The Neurons in the Myocardium of the Mammalian Heart Have Perceptive Sensory Functions Locally in the Heart Like Sensory Cortical Neurons of the Brain [191]
- Amanda DaSilveira**, Empirical Investigation of Scales on Self-Consciousness and its Related Constructs in Brazil and in the United States [202]
- Marcos Estellita Lins**, Metacognitive Schemes Applied to Social Problems Structuring [204]
- Anya Farennikova**, Seeing Absence [213]
- Gustavo Gauer**, Auto-noetic Consciousness in Episodic Recall and Simulation: An Episodic Processing Hypothesis [162]
- Francesco Giorlando**, Why Consciousness Doesn't Sleep: An Information Theory of Continuity in Consciousness [209]
- Ida Hallgren Carlson**, Why Make It Conscious? The Function of Consciousness in Therapeutic Change [171]
- Gail D. Kelly**, Mental Imagery as Adaptive Healing Mechanisms [167]
- Henry Kennedy**, Tribal Networks and Consciousness [192]
- Chad Kidd**, A Phenomenological Model of the Moderate Richness of Conscious Experience [168]
- Simone Marini**, The Semantics of 'Perception': A Critical Examination of D. Milner and M. Goodale's Proposal [159]
- Narisa Marrett**, Attentional Orienting - Conscious or Unconscious? [156]

- Ian O'Loughlin**, Connectionist Semantics, Feature Processing, and the Interpretability of Dimensions in State-Space [193]
Stephen Waldon, Quantum Chalk for a Classical Blackboard [190]

P10 *Physical & Biological Sciences*

- Marcus Abundis**, Towards a Unified Field Theory of Human Behavior - Global Cultural Evolution [248]
Matti Bergstrom, Mathematical Theory of Human Consciousness and its Three Forms of Thinking: Psychological, Physical, Spiritual [236]
Casey Blood, Quantum Mechanics Implies Consciousness is Not Based in the Physical Brain [219]
Gerard Blommestijn, Quantum-Exit From Materialistic Confinement [215]
Michele Caponigro, Quantum Interpretation of Vedic theory of Mind: An Epistemological Path and Objective Reduction of Thoughts [220]
Gilberto De Paiva, Pattern Recognition Principle of Mind Functioning [239]
Ralph Frost, Imagine Consciousness and Qualia as a Single Internal Analog Language Made of Ordered Water Forged During Respiration in Concert with Experience [246]
Alex Gamma, Evolutionary Psychology, or How Not to Explain the Human Mind [254]
Albert Garcia-Romeu, Self-Transcendence, Conceptualization, and Methodology: State of the Science [255]
Kenneth Van Gross, Primal Neuroanthropology- The Study of Archetypal Postures, Movements and Behavior in Sports and Related Activity that Connect us to our Evolution, Infancy, Neurodegeneration and Primordial Selves [256]
Syamala Hari, Mind Field, Active Information, and Zero-Energy Tachyons [220]
Franz Klaus Jansen, Consciousness Functioning with Potentiality Systems Partially Isomorphic to Quantum Mechanics [221]
Christian Thomas Kohl, Buddhism and Quantum Physics: The Space Between Two Things [225]
Andy Kuniyuki, Primordial Influence of Unequal on Evolution of Consciousness [257]
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CLUB CONSCIOUSNESS 3

9:45 pm - Midnight, Leo Rich Theatre

SATURDAY, APRIL 17

PLENARY 10

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PL10 New Directions in NCC Research

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Moran Cerf, Projecting Thoughts Using the Decoded Activity of Single Neurons in the Human Brain [104]

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Anirban Bandyopadhyay, Molecular Nanobrain - The Future of Consciousness? [339]

PLENARY 11

11:10 am - 12:35 pm, Leo Rich Theatre

PL11 Keynote

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2:00 - 4:10 pm, Leo Rich Theatre

PL12 Mindwandering and Consciousness

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END-OF-CONSCIOUSNESS PARTY

7:30 pm till ???

Maynards at the Depot – across from Congress Hotel

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