# 57<sup>th</sup> ANNUAL MEETING OF THE ALABAMA PHILOSOPHICAL SOCIETY



September 27–28, 2019 Hilton Pensacola Beach Gulf Front 12 Via Luna Drive Pensacola Florida, 32561

# 57TH ANNUAL MEETING OF THE ALABAMA PHILOSOPHICAL SOCIETY

Keynote Speaker
Rekha Nath
University of Alabama

**President**Chelsea Haramia
Spring Hill College

Vice President
Thomas Metcalf
Spring Hill College

Secretary-Treasurer
Kristina Grob
University of South Carolina Sumter

Website alphilsoc.org

#### Registration

The registration fee of \$55 is payable at the registration desk between 8:00 am and 12:10 pm. The secretary-treasurer can receive cash and checks during the conference. If you wish to pay by check, make checks out to "Alabama Philosophical Society." If you wish to pay by Venmo, pay to the Vice President, Thomas Metcalf, username Thomas-Metcalf. The registration fee for undergraduates is \$10.

# FRIDAY, SEPTEMBER 27, 8:00 a.m.–12:00 p.m.

Session & Time	Emerald 1	Emerald 2	Aquamarine 1	Aquamarine 2
Session 1	"Aspiration vs. Moral Luck: A	Deep South Philosophy and	"Contextualism and the Politics of	"Nomological Argument for the
8:00 a.m.– 8:40 a.m.	Murdochian Response"	Neuroscience Workshop Sophrosyne in Plato's Charmides" E		Existence of God"
	Kristina Grob	Session 1: Tools &	Matthew Eckel	Tyler Hildebrand, Dalhousie
	University of South Carolina	Neurocomputation (8:30–8:45)	University of South Florida	University &
	Sumter	Mahi Hardalupas: "Making neural	·	Thomas Metcalf, Spring Hill
		networks neural again: What bio-		College
Session 2	"Inescapability of Moral Luck"	inspired computational models teach	"Aristotelian Revision and Editorial	"Deep Disagreement, Hinge
8:50 a.m		us about multiple realisability"	Error in Nicomachean Ethics VI.2"	Commitments, and Intellectual
9:30 a.m.		Corey Maley: "Analog-digital		Humility"
		modulation of synaptic transmission"		
	Taylor Cyr		Samuel Baker	Drew Johnson
	Samford University	Session 2: Neuroimaging: tools &	University of South Alabama	University of Connecticut
		Frameworks (9:55-11:10)		
Session 3	"Moral Responsibility, Alternative	Vanessa Bentley: "Feminist	"Aristotle's Formula of Humanity"	"Does Peer Disagreement Warrant
9:40 a.m.–	Possibilities, and Acting on One's	standpoint as a tool for cognitive		Moral Skepticism?"
10:20 a.m.	Own"	neuroscience"		
		Rick Shang: "Visual experience and		
	Bradford Stockdale	the creation of neuroimaging"	Rob Reed	Josh May
	Florida State University		Texas A&M University	University of Alabama
		Session 3: Special Pre-Lunch		Birmingham
Session 4	"Consequentializing Group	Presentation on Self-	"Proper Parts and the Arbitrariness	"Intimacy and Obligation"
10:30 a.m	Membership: A Reply to Causal	Experimentation in Neuroscience	Problem"	
11:10 a.m.	Impotence"	(11:20 am-12:00 pm)		
	775° 41 A 1 41	Brian Keeley: "Auto-	F ' W	
	Timothy Aylsworth	experimentation: Essential, foolhardy	Eric Yang	Guy Rohrbaugh
	Florida International University	or both?	Santa Clara University	Auburn University
Session 5	"Racial Profiling & Suspect	12:00-12:30 pm: LUNCH	"Just what was that supposed to	"Why Mark Murphy is Wrong
11:20 a.m	Descriptions: An Epistemic	(sponsored by the MSU	mean? An Investigation of Non-	About Some Things About God"
12:00 p.m.	Approach"	Department of Philosophy and	Overt Pejorative Communication"	
		Religion)		
	Alexandra Lloyd		Ralph DiFranco	Chris Dodsworth
	University of Colorado Boulder		Auburn University	Spring Hill College

FRIDAY, SEPTEMBER 27, 1:30 p.m.-5:30 p.m.

	Emerald 1	Emerald 2	Aquamarine 1	Aquamarine 2
Session 6 1:30 p.m.– 2:10 p.m.	"Mereological Unity as Joint Cooperation"	Session 4: Developing Novel Behavioral Measures (12:30–1:45) Nina Atanasova, Charles Vorhees, and Michael Williams: "The Cincinnati water	"Philosophy and Empirical Research on Inner Speech: Towards a Symbiotic Relationship"	"Argument for IBE From the Surplus Value of Understanding"
Session 7 2:20 p.m.– 3:00 p.m.	Nick Jones University of Alabama Huntsville  "Metaphysical Differences, Collective Intentionality, and Group Mentality"	maze in the making"  Jacqueline Sullivan: "Can rodent iPADs advance our understanding of cognition?"  Session 5: Tools for Integrating Neuroscience Scales (1:55–3:10)  David Colaço: "Can tool development solve	Andrew Morgan University of Alabama Birmingham "Inferential Internalism Defended"	Frank Cabrera Milwaukee School of Engineering "Faith, Reason, and the Prisoner's Dilemma"
	Adam Arico University of Alabama Tuscaloosa	neuroscience's data integration problem?"  Antonella Tramacere: "Triangulation in the technological and informational explosion in neuropsychiatry"	Brett Coppenger & Sam Taylor Tuskegee University	Ted Poston University of Alabama Tuscaloosa
Session 8 3:10 p.m.– 3:50 p.m.	"Enacting Hatred: A Problem (Or Two)"  T. Allan Hillman &	Session 6: Engineering I and Artifacts (3:20–4:35)  John Bickle: "Theory has had only a modest	"Should Silencing Assume Oppression?"	"Introspection and Self- Blindness"
	Tully Borland University of South Alabama	amount to do with the building of these ingenious devices It is engineering that	David Spewak Marion Military Institute	Sean Hermanson Florida International University
<b>Session 9</b> 4:00 p.m.– 4:40 p.m.	"Framework for Experiencing the Social World: Why Families are not Congregations, Sports Teams or Political Communities"	counts" <u>Carl Craver</u> : "Artifacts and scientific realism"  Session 7: Tools for Measuring and	"Epistemic Insignificance of Perceptual Phenomenology"	"Counterfactuals of Freedom and St. Anselm's Explanations of Divine Foreknowledge and Human Freedom"
Session 10 4:50 p.m.–	Laura Kane University of Tampa "Contrast Cases and Intrinsic Value"	Manipulating Representations Daniel Burnston,: "Decoding analyses and neural representation" Gualtiero Piccinini, "Observing neural representations using multiple methods and	Timothy Butzer University of Alabama Tuscaloosa "Moral Status and the Architects of Principlism"	D. Sansom Samford University "Russellian Monism and Structuralism About Physics"
5:30 p.m.	Zak Kopeikin University of Colorado Boulder	tools" <u>Daniel Weiskopf</u> , Georgia State U.: "Data mining the brain to decode the mind"	Allison Thornton University of South Alabama	Torin Alter University of Alabama Tuscaloosa

Reception: Friday, September 27, 7:30 p.m.–10:00 p.m.; Alabama Philosophical Society Suite; Location TBA

SATURDAY, SEPTEMBER 28, 8:00 a.m.-1:40 p.m.

	Emerald 1	Emerald 2	Aquamarine 1	Oleander 1	Aquamarine 2
Session 11 8:00 a.m.–	"Not So Lucky: The Failure of Pritchard's Anti-Luck	"Ernst Haeckel's Kantian Artistic Practice"	"Division of Moral Labor: A Platonic Account"	"Vagueness and Neutrality"	Session 8: Tools for Exploration and Concept Development (8:15–
8:40 a.m.	Analyses of Knowledge"		Justin Morton	Darren Hibbs	10:15) Luis Favela, John Beggs:
	James Simpson University of Florida	Stefan Forrester University of Montevallo	University of California Davis	Nova Southeastern University	"Multielectrode arrays as a case study in tools driving new concepts
<b>Session 12</b> 8:50 a.m.– 9:30 a.m.	"Public Reasons, Shared Humanity? An Objection to Korsgaard's Argument to the Normative Question"	"Freud and Derrida: On the (Im)possibility of Psychoanalysis"	"Repugnant Conclusion for Busy, Practical People"	"Projects Worthy of Love"	in neuroscience"  Philipp Haueis: "Exploratory concept formation and tool development in neuroscience: The
	P. Gispert Louisiana State University	Michael Clifford Mississippi State University	Leonard Kahn Loyola University New Orleans	Rachael Goodyer Harvard University	case of "bug detectors" and the "default mode" of brain function"  Sarah Robins: "The silent engram"
Session 13 9:40 a.m.– 10:20 a.m.	"Great Minds Do Not Think Alike: Less Reflective Philosophers Tend Toward Certain Views"	"A Wittgensteinian Critique of The Causal Theory of Action" Megan Fritts	"Why Ethicists Must be On Institutional Animal Care and Use Committees (IACUCs)"	"Gambler's Justice"	Session 9: Tools, Reductionism, and Causal Maps (10:30–11:45)
	N. Byrd Florida State University	University of Wisconsin– Madison	Nathan Nobis Morehouse College	Nathan Hanna Drexel University	Ann Sophie Barwich: "Imaging the living brain: Reductionism revisited in times of dynamical
Session 14 10:30 a.m.– 11:10 a.m.	"Meaning, Monism, and Metaphysics"	"Phenomenal Conservativism and Imagination: A Reply to Teng"	"Fake News on Social Media: Eliminating a Uniquely Noxious Market"	"No Subject? No Problem: An Essay on Death and Betrayal"	systems" <u>Lauren Ross</u> : "Tracer and tagging experiments in neuroscience"
	Adam Podlaskowski Fairmont State University	Madeleine Hyde Stockholm University	Megan Fritts, UW–Madison & Frank Cabrera, MSOE	Caroline Mobley University of Tennessee, Knoxville	Session 10: Tools, Mechanisms, Transference of Solutions, and Engineering II (1:00–3:00)
Session 15 11:20 a.m.– 12:00 p.m.	"Trickle-Down Epistemology"	"Against Conventional Wisdom" Rachel Rudolph, Auburn University	"Standard Measurement and Proxy Measurement: A Paleoclimate Study"	"Gazelles, Kahneman and Skepticism"	Marco Nathan: "New predictive tools in neuroscience: A 'diet' mechanistic perspective"  Patrick Hopkins: "A model for
	Jon Matheson University of North Florida	(joint work with Alexander Kocurek and Ethan Jerzak)	Joseph Wilson University of Colorado Boulder	Michael Patton University of Montevallo	generating new laboratory tools" <u>Gregory Johnson:</u> "Tools, experiments, hypotheses, and
Session 16 Keynote 12:10 p.m.– 1:40 p.m			descriptions: An examination of Bickle's "Revolutions in		

**Business Meeting**: Saturday, September 28<sup>th</sup>, 2:00 p.m.–3:15 p.m., Flounders Restaurant

#### **KEYNOTE ADDRESS**

Saturday, September 28<sup>th</sup>, 12:10 p.m.–1:40 p.m. Location: Emerald 2

#### Welcome and Introduction

President of the Alabama Philosophical Society Chelsea Haramia Spring Hill College

# "A war on obesity or a war on fat people? The injustice of sizism"

# Rekha Nath University of Alabama

Fat persons suffer a host of harms. Many endure workforce discrimination, receive inferior health care, cannot comfortably fit into airplane seating, are relentlessly teased and criticized for their weight, and experience intense feelings of internalized shame and self-loathing. What, if anything, should be done about this? Widely held intuitions pull us in different directions. On the one hand, increasingly, fat shaming is seen as problematic, and there has been popular embrace of the body positivity movement, which emphasizes greater acceptance of diverse body types and sizes. On the other hand, the notion that we should be wholly accepting of fat bodies seems extreme: it's thought that surely, from a public health standpoint, we should neither abandon efforts to combat obesity nor condone lifestyle choices that lead to the serious health problems associated with larger bodies.

This clash of intuitions results in part from a failure to think about the social disadvantages associated with fatness in a systematic way. In this talk, I will argue that we should theorize about those varied disadvantages through the lens of *social equality*. Taking this approach will enable us to recognize *sizism*—the systematic ways that our society penalizes fat individuals for their size—as the serious injustice that it is: one that is, in important respects, akin to other forms of unacceptable structural intolerance, such as racism, sexism, and homophobia. Moreover, the approach will both help explain why the so-called "war on obesity" has largely morphed into a war on fat people and provide a basis for identifying concrete remedies for addressing sizism.

#### PRESENTATION ABSTRACTS FOR THE ALABAMA PHILOSOPHICAL SOCIETY 2019 MEETING

#### Session 1: Friday, 8:00 a.m.–8:40 a.m.

# Aspiration vs. Moral Luck: A Murdochian Response Emerald 1

Kristina Grob (University of South Carolina Sumter)

After reviewing the tension between Agnes Callard's recent work on aspiration and Galen Strawson's arguments against moral responsibility and self-creation, I make a two-part argument, relying heavily on Iris Murdoch's The Sovereignty of Good. First, pain can provide the impetus to first attend to and then come to value new things, and Murdoch's M exemplifies this. Second, if self-creation is an endless task, any evidence for which is years in the making, then the years of practice and experience an aspirant may have can provide nearly limitless opportunities for cultivating the attention that presages the pain that prompts self-change.

# Contextualism and the Politics of Sophrosyne in Plato's Charmides Aquamarine 1

Matthew Eckel (University of South Florida)

This paper provides a contextualist interpretation of Plato's Charmides, showing that the dialogue is centrally concerned with the moral education of Plato's audience regarding the distribution of political power in Athens' culturally turbulent fifth and fourth centuries. Typical interpretive frameworks gravely underdetermine the abnormal, extradialogical conclusion of the text, which contributes to scholarly debate regarding both Plato's philosophical intentions and his method of presentation. The contextualist reading of the Charmides allows us to understand Plato's pedagogical intentions for his audience, which are philosophical and political, while accounting for the dramatic elements of the dialogue as, not merely incidental, but essential.

# Nomological Argument for the Existence of God

Aquamarine 2

Tyler Hildebrand (Dalhousie University) Thomas Metcalf (Spring Hill College)

We argue that God provides the best explanation of regularities in nature. We begin by distinguishing competing explanations for lawlike regularities. A successful explanation must avoid two perils. The first is the peril of insufficient structure: some explanations, such as Humeanism and Primitive Laws, provide too little structure, predicting a universe without regularities, which is falsified by experience. Prominent attempts to fix this problem render the intrinsic probability of the hypothesis in question abysmally low. The second peril is the peril of too much structure: other attempted explanations preclude an explanation of certain lawlike regularities actually discovered by scientists, and so are also falsified by experience. We argue that an explanation based in the creative, intentional action of a powerful, intelligent being avoids these two perils whereas competing explanations do not.

### Session 2: Friday, 8:50 a.m.-9:30 a.m.

# Inescapability of Moral Luck Emerald 1

Taylor Cyr (Samford University)

I argue that any account attempting to do away with resultant or circumstantial moral luck is inconsistent with a natural response to the problem of constitutive moral luck. It is plausible to think that we sometimes contribute to the formation of our characters in such a way as to mitigate our constitutive luck at later times. But, as I argue here, whether or not we succeed in bringing about changes to our characters is itself a matter of resultant and circumstantial luck. I conclude with a dilemma, both of horns of which require accepting some form of moral luck.

# **Aristotelian Revision and Editorial Error in** *Nicomachean Ethics* **VI.2**Aquamarine 1

Samuel Baker (University of South Alabama)

The text of *Nicomachean Ethics* VI 2 should be rearranged such that lines 1139a31-b11 follow the word κοινωνεῖν at 1139a20, and the rationale for this rearrangement is that Aristotle inserted these lines as a note, which the first editor mistakenly added in the wrong place. The note also contains a distinctively Nicomachean doctrine—namely, that the intellect is essentially theoretical and only practical by extension—while the rest of the text contains verbal similarities to passages in the Eudemian Ethics. Consequently, there is good reason to think that NE VI 2 is a Nicomachean revision of an originally Eudemian text.

# **Deep Disagreement, Hinge Commitments, and Intellectual Humility**Aquamarine 2

Drew Johnson (University of Connecticut)

I consider an explanation of the intractability of deep disagreement offered by hinge epistemology, according to which some deep disagreements are intractable because they concern hinge commitments that are not directly responsive to rational considerations. This explanation seems to have the troubling implication that the rational response to deep disagreement is to dogmatically hold to one's initial position. I address this problem by identifying an attitude of intellectual humility that is appropriate to have towards one's most firmly held convictions, and suggest that this attitude provides the basis for a constructive albeit non-rational way to resolve deep disagreement.

#### Session 3: Friday 9:40 a.m.–10:20 a.m.

### Moral Responsibility, Alternative Possibilities, and Acting on One's Own Emergld 1

Bradford Stockdale (Florida State University)

The flicker defense has become one of the most popular responses to Frankfurt-style counterexamples (FSCs) to the Principle of Alternative Possibilities (PAP). PAP states that an agent is morally responsible for what they have done only if they could have done otherwise. The flicker refers to an alternative that remains open to the agent in an FSC such that the case is unable to show that PAP is false. In this paper I argue that with a proper of understanding of what it means to perform an act 'on one's own' a case can be constructed in which even these flickers disappear. Insofar as this new case is successful, it will be able to sidestep arguments about robustness while showing that moral responsibility does not require alternative possibilities.

# **Aristotle's Formula of Humanity**Aquamarine 1

Rob Reed (Texas A&M University)

My main purpose in this paper is to show that Aristotelian virtue ethics has no need of supplementation with an ethical outlook emphasizing impartiality. Irwin has indicated that extending elements of Aristotle's theory to cover moral concern for strangers outside the political community might be very difficult and adopting a perspective of impartiality is an easier way to ground ethical concern for humans as such. I shall argue it is unnecessary, for Aristotelian justice extends to anonymous strangers with little effort. Following Irwin's own advice, the key to such extension is seeing the role that love of human nature plays already in Aristotle's account complete friendship.

# **Does Peer Disagreement Warrant Moral Skepticism?**Aquamarine 2

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Josh May (University of Alabama at Birmingham)

Fundamental moral disagreements lead some moral skeptics to reject any claims to moral knowledge. Whether disagreements undermine moral knowledge, rather than just objectivity, depends on whether the disputants are epistemic peers. Some prominent responses to moral disagreement argue that one can rationally remain steadfast in light of it, but I draw on empirical research to develop a different response. The evidence suggests that few moral disagreements meet the relevant criteria of being both foundational and among epistemic peers. The threat is largely limited to only some of our most controversial moral beliefs. I conclude that, while some intellectual humility is warranted, global moral skepticism isn't.

#### Session 4: 10:30 a.m.-11:10 a.m.

## Consequentializing Group Membership: A Reply to Causal Impotence

Emerald 1

Timothy Aylsworth (Florida International University)

In this paper, I defend a new way for consequentialists to respond to cases of collective harm. First, I explain why some of the popular proposals, such as the "threshold response," fail to provide fully general reasons in these cases. I then suggest how consequentialism could potentially resolve the issue by including group membership as a morally relevant consequence. According to my proposal, becoming a member of a group that collectively causes more harm than good is a bad consequence of an action. Thus, we always have a pro tanto reason to abstain from contributing to a collective harm.

# **Proper Parts and the Arbitrariness Problem**

Aquamarine 1

Eric Yang (Santa Clara University)

A recent solution to the problem of material constitution claims that ordinary proper parts (such as left-feet) exist, but the complements of these objects (such as left-foot complements) do not exist. In this paper, I argue that this solution should be rejected since it fails to avoid worries of arbitrariness.

### **Intimacy and Obligation**

Aquamarine 2

Guy Rohrbaugh (Auburn University)

I want to frame my comments today by positioning them downstream of some recent work I admire. When Susan Wolf theorizes the value of meaningfulness, or when Harry Frankfurt investigates the reasons of love, or when Anthony Cross seeks a ground for aesthetic obligations, I understand their work to be part of a wider, highly variegated effort to create some philosophical space in our thinking about values and reasons between the traditionally dominant, even hegemonic, poles of reasoning about self-interest and reasoning about morality.

## Session 5: Friday, 11:20 a.m.-12:00 p.m.

5ession 5: Friday, 11:20 a.m.—12:00 p.m.		XX71	
Racial Profiling & Suspect	Just what was that supposed to mean?	Why Mark Murphy is Wrong About	
<b>Descriptions: An Epistemic Approach</b>	An Investigation of Non-Overt	Some Things About God	
Emerald 1	Pejorative Communication	Aquamarine 2	
	Aquamarine 1		
Alexandra Lloyd (University of Colorado	Ralph DiFranco (Auburn University)	Chris Dodsworth (Spring Hill College)	
Boulder)	· · · · · · · · · · · · · · · · · · ·	\ 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
It is puzzling that while racial profiling	Recent work on pejorative communication	It is a commonplace in Christian theology	
has been subject to significant moral	has focused on overt derogation with	that God is loving. In fact, most people,	
scrutiny, the use of race in suspect	slurs, and covert signals, like racist	including theologians (I asked one!)	
descriptions has been treated as	dogwhistles. This paper introduces a third	would affirm that God does not	
unproblematic. There is a prima facie case	category: obfuscating pejorative behavior,	merely <i>happen</i> to be loving (lucky us!)	
to be made that the same considerations	which is ambiguous between a deliberate	but that God is <i>perfectly</i> loving, and	
against racial profiling should also count	insult and innocuous behavior. Imagine a	necessarily so. <i>Deus caritas est</i> , after all.	
against the use of race in suspect	variation on "flipping the bird" where one	Surprisingly, then, Mark Murphy denies	
descriptions. I argue that there are in fact	subtly extends the middle finger to scratch	that God is necessarily loving and so also	
important epistemic differences between	one's cheek. The recipient is intended to	denies that love is among the divine	
these two practices. Racial profiling and	have the sense that they've been slighted,	perfections. In this talk, I'll reconstruct	
suspect descriptions rely on different	but the performer could also be seen as	Mark's argument and try to say where I	
kinds of evidence, which justify different	innocently scratching an itch. I argue that	think he goes wrong.	
doxastic attitudes. In virtue of this	recognizing the different communicative		
epistemic difference, we can understand	intentions behind overt, covert, and		
the divergent moral evaluations given to	obfuscating pejorative behavior is crucial		
these two practices.	for accurate ethical assessment of each.		

Session 6: Friday, 1:30 p.m.–2:10 p.m.

Emerald 1	Aquamarine 1	Aquamarine 2	
Mereological Unity as Joint	Philosophy and Empirical Research on	Argument for IBE From the Surplus	
Cooperation	Inner Speech: Towards a Symbiotic	Value of Understanding	
Emerald 1	Relationship	Oleander 1	
	Aquamarine 1		
Nick Jones (University of Alabama	Andrew Morgan (University of Alabama	Frank Cabrera (Milwaukee School of	
Huntsville)	at Birmingham)	Engineering)	
What is the difference between a unified	In order to adjudicate several debates in	Here, I articulate and critically evaluate a	
whole and a mere sum or aggregate?	philosophy, from epistemology to	novel argument for IBE that synthesizes	
Between a brick wall, for example, and a	philosophy of action, we need to know	various lines of thought in contemporary	
pile of rubble? I examine Kathrin	more about what inner speech is actually	epistemology. In broad strokes, this	
Koslicki's "Neo-Aristotelian" account of	like. The good news is that empirical	argument has two main premises: (1)	
unified wholes, according to which	research on inner speech is already	epistemic rationality consists in promoting	
unified wholes are instances	underway in the field of psychology. The	epistemically valuable states of affairs and	
of real kinds, such that every real kind	bad news is that these studies are often	(2) understanding is a fundamental	
provides formal constraints on the	held back by a lack of adequate	epistemic value. The conclusion of this	
number, variety, and configuration of the	conceptual resources. In this paper I	argument is that IBE is a justified method	
parts of its instances. I offer some	discuss some examples of empirical	of inference because IBE best promotes,	
counterexamples to Koslicki's account,	research on self-talk and inner speech to	overall, what is epistemically valuable.	
and I propose a competing account of	demonstrate how the field would be	Despite its promise, I show that the thesis	
unified wholes as sums of cooperating	enriched by careful application of specific	that understanding is a fundamental	
parts.	tools from philosophy of language.	epistemic value is unsupported, and thus	
		this style of argument for IBE fails.	

### Session 7: Friday, 2:20 p.m.–3:00 p.m.

<b>Metaphysical Differences, Collective</b>
<b>Intentionality, and Group Mentality</b>
Fmerald 1

Adam Arico (University of Alabama Tuscaloosa)

Given the many philosophical issues that revolve around the degree to which groups possess mentality—justice, morality, ontology, epistemology, etc. this paper seeks to address the debate concerning collective intentionality. It will focus on arguments that the intentional states we often attribute to groups are irreducible to the intentional states of the individual members, that we should see groups as having mental states (and, thus, minds) of their own, above and beyond the mental states (and minds) of their constituent members. Ultimately, I want to challenge one central assumption underlying most arguments in favor of collective intentionality and group mentality.

# **Inferential Internalism Defended**Aquamarine 1

Brett Coppenger & Sam Taylor (Tuskegee University)

The vast majority of our beliefs depend, in one way or another, on other beliefs. In other words, most of my beliefs are inferential. Endorsing a view that requires awareness of the inferential connection between beliefs is tantamount to endorsing what we call Inferential Internalism. The purpose of this paper threefold: first, we will attempt to clearly define Inferential Internalism; second, we will present what we take to be the primary motivation for Inferential Internalism; and third, we will consider a fundamental objection to Inferential Internalism and defend Inferential Internalism from this objection.

# Faith, Reason, and the Prisoner's Dilemma

Aquamarine 2

Ted Poston (University of Alabama Tuscaloosa)

My goal in this paper is to use the Prisoner's Dilemma as a tool for thinking about the nature and value of interpersonal faith. I argue that interpersonal faith has the power to transform the interaction in a way that the superior goods of mutual cooperation can be achieved. Faith generates what I call "faith transformed preferences." This provides a clear grounding to the value of faith. Moreover, once faith transforms a player's preferences, reason issues a clear recommendation in favor of cooperation. Thus, faith is able to reach a better solution to a decision problem reason is powerless to reach. Yet there is no conflict with reason because faith's transformative power comes to be fully endorsed by reason.

#### Session 8: Friday, 3:10 p.m.–3:50 p.m.

Enacting Hatred: A Problem (Or Two)
Emerald 1

T. Allan Hillman & Tully Borland (University of South Alabama)

R.A. Duff and S.E. Marshall (2018, hereafter DM) have attempted to develop a view according to which "hate" can be the legitimate subject of criminal prosecution. Their view is rather unique in that, according to them, they avoid a host of objections normally associated with the criminalization of hate by focusing on "hate" as (positively) a distinct public wrong of radical exclusion from civic participation and (negatively) the absence of a civic duty which all citizens owe one another in a liberal republic. Our aim in this essay is to set out their view, clarify it to the extent that we can, and offer a few critical remarks.

**Should Silencing Assume Oppression?** Aquamarine 1

David Spewak (Marion Military Institute)

Silencing theory attempts to identify a harm speakers experience beyond failed perlocution. Accordingly, silencing is defined as systematic communicative interference. The challenge for silencing theory has been to properly characterize this systematic communicative interference. In this paper I consider two similar approaches, both of which attempt to incorporate oppression into their definitions. I then show that this approach to identifying a harm faces serious conceptual problems. I make clear what these problems are by comparing silencing with testimonial injustice. I conclude that though silencing may be oppressive, we ought not define it in terms of oppression.

**Introspection and Self-Blindness** Aquamarine 2

Sean Hermanson (Florida International University)

Philosophers trying to make sense of the special epistemic character of introspection have considered the notion of "self-blindness" (i.e. where a rational agent lacks access to her own beliefs). Stoliar and Shoemaker recently contend that self-blindness is not possible. I argue Stoljar's view that introspection involves a rational necessity doesn't capture introspection's special character. Meanwhile Shoemaker's constitutive view has trouble making sense of selfdeception. Though Shoemaker can avoid some difficulties by revisiting some empirical claims about self-deception often taken for granted in these discussions, both views encounter difficulties when it comes to qualia.

### Session 9: Friday, 4:00 p.m.—4:40 p.m.

## Framework for Experiencing the Social World: Why Families are not Congregations, Sports Teams or Political Communities

Emerald 1 Laura Kane (University of Tampa)

In this paper, I argue that the right understanding of collective intentionality can elucidate the differences between kinds of social groups. Specifically, I argue that Margaret Gilbert's account of joint commitment is promising because it emphasizes the importance of obligations and entitlements for the creation and maintenance of social groups. However, Gilbert's framework is not sufficient for explaining why we have certain obligations to family members that we do not have to neighbors, congregations, or political communities. I introduce Carol Gould's notion of reciprocity as a necessary supplement to Gilbert's theory of joint commitments to remedy this shortcoming.

## **Epistemic Insignificance of Perceptual Phenomenology**

Aquamarine 1

Timothy Butzer (University of Alabama Tuscaloosa)

It is natural to think that phenomenology must play a central role in any epistemic account of perceptual warrant. I contend that this claim is mistaken. The thesis that I will advance is that the phenomenology of perceptual experiences is irrelevant to their ability to warrant perceptual beliefs. I present various problems for this approach, then consider various fallback positions available to the defender of the epistemic significance of phenomenology and conclude that whatever its place in our metaphysical understanding of the world, perceptual phenomenology is epistemically insignificant with regards to the project of explaining perceptual warrant.

### Counterfactuals of Freedom and St. Anselm's Explanations of Divine Foreknowledge and Human Freedom Aquamarine 2

D. Sansom (Samford University)

I argue that St. Anselm's explanation of divine foreknowledge and human freedom can support counterfactuals of freedom. Anselm's metaphysical claim of the uprightness of creation accounts for the connection between divine foreknowledge and human freedom. God has designed and ordered creation according to goodness, and by living according to it, people experience a divinely given uprightness of creation. Although people freely choose for uprightness and hence can experience a rectitude of will, God knows the uprightness of such choices before the choices are made, and, consequently, God knows all possible counterfactuals of freedom.

### Session 10: Friday, 4:50 p.m.-5:30 p.m.

### **Contrast Cases and Intrinsic Value**

Emerald 1 Zak Kopeikin (University of Colorado Boulder)

This paper examines and criticizes a separability principle about intrinsic value which purports to allow one to use contrast cases—i.e., cases in which all is held fixed except for the examined feature—to infer truths about intrinsic value. I argue that this principle fails to deliver truths about intrinsic value but succeeds in informing us about the feature's intrinsic nature (and, in particular, about its disposition to be contributively valuable). I do this by utilizing Oddie's discussion of the principle and Moore's concept of intrinsic value. Finally, I show how my conclusion provides a structure for future value inquiry.

# Moral Status and the Architects of Principlism

Aquamarine 1 Allison Thornton (University of South Alabama)

In this paper, we discuss Beauchamp and Childress's treatment of the issue of moral status. In particular, we (1) introduce the five different perspectives on moral status that Beauchamp and Childress consider in Principles of Biomedical Ethics and explain their alternative to those perspectives, (2) raise some critical questions about their approach, and (3) offer an alternative way to think about one of the five theories of moral status (the theory based on human properties) that is more in line with what we believe some of its leading advocates affirm.

# Russellian Monism and Structuralism About Physics

Aquamarine 2 Torin Alter (University of Alabama Tuscaloosa)

Some claim that Russellian monism carries a commitment to a structuralist conception of physics, on which physics describes the world only in terms of its spatiotemporal structure and dynamics. We disagree. On Russellian monism, there is more to consciousness, and to the rest of the concrete reality, than spatiotemporal structure and dynamics. But that supports only a conditional claim: if structuralism is true, then there is more to consciousness and to the rest of the concrete reality than physics describes. This result, we argue, provides Russellian monists with a response to certain objections, including one by Alyssa Ney (2015).

### Session 11: Saturday, 8:00 a.m.–8:40 a.m.

### Not So Lucky: The Failure of Pritchard's Anti-Luck Analyses of Knowledge Emerald 1 James Simpson (University of

Florida)

In this paper, I will show how Duncan Pritchard's (2005, 2007, 2012) various anti-luck analyses of knowledge face a rather serious problem: they either yield the intuitively incorrect result in an adapted version of Ernest Sosa's (2000: 13) Garbage Chute Case or, if they don't, then they yield the intuitively incorrect result in an adapted version of Pritchard's (2005: 153) Lottery Case.

### Ernst Haeckel's Kantian Artistic Practice Emergld 2

Stefan Forrester (University of Montevallo)

Ernst Haeckel viewed Kant's distinction between the phenomenal and noumenal realms as counterproductive to the emerging scientific worldview of the early 20th century. I contend that there is a serious tension between Haeckel's overt philosophical denials of Kant's metaphysics and his own artistic practice. Although Haeckel disavows Kantian noumena as mere superstitions, his artworks seem to have been produced with some basic assumptions from Kantian aesthetic theory that integrally involve the noumenal. Specifically, I will discuss two major aspects of Kant's aesthetics and how they seem to be at the core of Haeckel's artistic practice: (1) the nature of aesthetic judgments as purely reflective and (2) aesthetic ideas.

# **Division of Moral Labor: A Platonic Account**Aquamarine 1

Justin Morton (University of California Davis)

Traditionally, moral virtue has been understood to be universal: a virtue we should aim for because we are humans, or moral agents, or whatever. Whatever the requirements of being subject to morality are so goes the account—moral virtues are virtues that all beings who meet those requirements should try to embody. This understanding of moral virtue often proceeds from the view that moral virtue is grounded in individual well-being or flourishing. In this paper, I attempt two main tasks. First, I present a non-universal account of the content of virtue. Second, to support this account, I give an account of the grounding of moral virtue on which virtue is grounded in the flourishing of a community.

# **Vagueness and Neutrality** Aquamarine 2

Darren Hibbs (Nova Southeastern University)

I assess a revised version of Greenough's account of vagueness as a form of epistemic tolerance. The revised definition aims to provide a neutral characterization of vagueness that all parties to the vagueness debate can accept. I critically assess the revised definition and ultimately argue that a neutral definition of vagueness is unnecessary.

### Session 12: Saturday, 8:50 a.m.-9:30 a.m.

## Public Reasons, Shared Humanity? An Objection to Korsgaard's Argument to the Normative Question

Emerald 1 P. Gispert Louisiana State University

In this paper I argue that Korsgaard's answer to the normative question relies on an unjustified premise—that valuing one's humanity commits one to value equivalently the humanity of all rational beings which leads Korsgaard to an unjustified conclusion—that the obligations that arise from valuing one's humanity are ultimately obligations to value the humanity of all rational beings. To show so, I suggest two different readings of the premise, and I show that the reading that Korsgaard needs to attain the conclusion that Korsgaard wants does not follow from the notion to which she appeals: the publicity of reasons.

# Freud and Derrida: On the (Im)possibility of Psychoanalysis

Emerald 2 Michael Clifford Mississippi State University

This paper examines the problems of interpretation and translation in psychoanalysis. These problems can be traced to metaphors of "depth" and verticality which tend to structure the entire conceptual framework of psychoanalysis. While these metaphors are crucial to the whole methodology of psychoanalysis, they also are among the major obstacles to the successful interpretation of psychical phenomena. I believe that these problems can be avoided by rethinking the notion of metaphor itself. After an examination of the structural problems peculiar to psychoanalytic interpretation, I will offer an understanding of metaphor which avoids appealing to originary postulates.

# Repugnant Conclusion for Busy, Practical People

Aquamarine 1

Leonard Kahn Loyola University NOLA

This paper is about population axiology, the part of ethical theory that concerns itself with the value of population sizes and of acting in ways that increase or decrease population sizes. In Section 1, I review the repugnant conclusion, a central problem in population axiology. In Section 2, I set up my own response by offering a taxonomy of replies to the repugnant conclusion and introducing the distinction between possible worlds that are remotely probable and those that are not. In Sections 3 and 4, I argue that within remotely probable possible worlds, the repugnant conclusion does not follow, while, outside remotely probable possible worlds, we lack both the relevant intuitions to judge these scenarios and the need to do so.

# **Projects Worthy of Love**

Oleander 1

Rachael Goodyer Harvard University

Susan Wolf has recently argued that living a meaningful life involves engaging in projects 'worthy of love.' Although Wolf furnishes examples of worthy projects she steers clear of offering a definition of such projects or specifying the criteria they would need to satisfy. This paper picks up where Wolf leaves off by offering a gloss of what it is for a project to be worthy of love: it tends to promote intrinsically valuable goods. My account defends a pluralist approach to the good in which a diversity of goods are rational to desire for their own sakes.

### Session 13: Saturday, 9:40 a.m.–10:20 a.m.

### Great Minds Do Not Think Alike: Less Reflective Philosophers Tend Toward Certain Views

Emerald 1 N. Byrd (Florida State University)

Research has yet to examine the link between philosophical views and reflection among philosophers. So the current paper presents a study of professional philosophers' views and their disposition to reason reflectively. The results suggest that less reflective philosophers are more likely to be theists, incompatibilists about free will, and more likely to endorse the socalled "deontological" response to the Trolley Problem. In other words, some of the philosophyreflection links found among laypeople replicated among philosophers: less reflective philosophers tended towards some of the same views as less reflective laypeople. This naturally raises questions about the nature and normative roles of reflection in philosophy.

### A Wittgensteinian Critique of The Causal Theory of Action Emerald 2

Megan Fritts (University of Wisconsin–Madison)

In this paper, I aim to identify and advance a Wittgensteinian explanatory desideratum: An explanatory theory should not render inquiry into its subject matter senseless, unjustified, or otherwise unworthy of pursuit. I then use this desideratum to argue that certain lines of inquiry in the philosophy of action particularly, the question of whether addicts are acting when they indulge their addictions are, in fact, rendered senseless, unjustified, or otherwise unworthy of pursuit by the causal theory of action explanation. I conclude that this should be taken as evidence that the causal theory misconceives the nature of actions and their explanations.

## Why Ethicists Must be On Institutional Animal Care and Use Committees (IACUCs)

Aquamarine 1

Nathan Nobis (Morehouse College)

Some animal research is arguably morally wrong or at least improvable. I argue that philosophical ethicists have expertise and perspectives that make them the most likely "stakeholders" to identify research that is wrong and problematic and advocate for improvements of problematic research. Given the ethical mandate of IACUCs, they therefore must have philosophical ethicists as members.

#### **Gambler's Justice**

Oleander 1

Nathan Hanna (Drexel University)

Legal punishment is morally risky—when we punish people we risk acting in ways that are seriously wrong. This is because it's easy to be mistaken about things that affect the morality of punishment, like what people have done and how responsible they are for what they've done. These mistakes can lead us to do things like punish the innocent and overpunish the guilty. In light of this risk, some punishment theorists endorse a risk averse view about punishment. This view is plausible. But its advocates often state it in objectionable ways. I'll argue that there's a better way to state it.

### Session 14: Saturday, 10:30 a.m.-11:10 a.m.

### Meaning, Monism, and Metaphysics Emergld 1

Emorala i

Adam Podlaskowski (Fairmont State University)

It is commonplace to assume that the semantic features of any given expression of a language to be in the same basic sort of business, whether it's representation, verification, inferential articulation, attitude expression, or something else. In what follows, I argue that this assumption places an unduly strong influence on the dialectical possibilities available in disputes between realists and non-realists.

# Phenomenal Conservativism and Imagination: A Reply to Teng

Emerald 2

Madeleine Hyde (Stockholm University)

Phenomenal Conservatism (PC) says that if it seems to a subject S that P, and S has no defeaters, then S has justification for believing that P. This thesis has faced an objection from Teng (2016), who accuses it of being too permissive for including cases of imagining, which should not confer such justification. Teng cites the Seashore experiments (1895), where subjects had imaginative seemings and hence justified but false beliefs. I argue that PC can answer Teng thus: Seashore's subjects did not have imaginative seemings, but perceptual seemings with false contents, just like the subjects of radical sceptical scenarios.

## Fake News on Social Media: Eliminating a Uniquely Noxious Market

Aquamarine 1

Megan Fritts (UW–Madison) Frank Cabrera (Milwaukee School of Engineering)

In this paper, we argue that there is a prima facie moral obligation to inhibit the market for fake news. We take as a starting point some arguments previous put forward by Satz (2010) regarding "noxious" markets namely, that we have reason to limit markets that inhibit citizens from standing equal to one another. We then argue three points: (1) the market for fake news is a noxious market; (2) we should resist explanations of the rise of belief in fake news that are couched in terms of "intellectual vice"; (3) we have moral obligations to limit the development of this market.

# No Subject? No Problem: An Essay on Death and Betrayal

Oleander 1

Caroline Mobley (University of Tennessee, Knoxville)

Let us assume, as Thomas Nagel does in his essay "Death," that there is no afterlife. If this is true, then, unlike Nagel, I think a misfortune such as betrayal cannot happen to a dead person. I argue that what is bad about betrayal is a change in what is good about the relationship, which must occur in the context of an active relationship indexed to time. And since a dead person cannot engage in relationships, he cannot be betrayed. If this is true, then we have a counterexample to Nagel's position that misfortunes are not indexed to time.

## Session 15: Saturday, 11:20 a.m.-12:00 p.m.

# **Trickle-Down Epistemology**Emerald 1

Jon Matheson (University of North Florida)

In this paper I examine the epistemic impact of a justified suspension of judgment about what one's evidence supports. Having outlined the nature of higher-order evidence, I motivate the view that a justified suspension of judgment about what one's evidence supports 'trickles down' calling for a first-order suspension of judgment as well. In other words, a justified suspension of judgment about what one's evidence supports is a full undercutting defeater. I then examine and respond to an objection to this account put forward by Lasonen-Aarnio (2014).

# **Against Conventional Wisdom** Emerald 2

Rachel Rudolph (Auburn University); joint work with Alexander Kocurek, and Ethan Jerzak

Conventional wisdom has it that truth is always evaluated using our actual linguistic conventions, not those we would have adopted in counterfactual scenarios. For instance, "If 'water' referred to gasoline, water would fuel fire" sounds false because 'water' in the consequent still refers to H2O, not gasoline. But there are linguistic contexts where this conventional wisdom fails—in particular, in the presence of what Einheuser [2006] calls cmonsters, or convention-shifting expressions. We show that cmonsters naturally arise when speakers entertain alternative conventions, and we develop an expressivist semantics to model convention-shifting. We also reassess some philosophical arguments that invoked the conventional wisdom.

## Standard Measurement and Proxy Measurement: A Paleoclimate Study

Aquamarine 1 Joseph Wilson University of Colorado Boulder

Historical climate scientists depend on so-called "proxies" to provide measurements of climatological events and processes in the past. In this paper I argue that the standard view espoused by groups like NOAA and the IPCC does not adequately distinguish proxy measurement from non-proxy measurement. While climate scientists consider proxy and non-proxy measurement to differ in whether they are indirect or direct, respectively, I argue that directness cannot do the necessary work. Rather, I argue that proxy measurement fundamentally differs from standard, non-proxy measurement in how confounding causal factors are accommodated.

# Gazelles, Kahneman and Skepticism

Oleander 1

Michael Patton University of Montevallo

In this essay, I begin with a discussion of Daniel Kahneman's wavs of beliefformation in his recent book Thinking, Fast and Slow. He describes what he calls System 1 (the fast system), the nearly instantaneous belief-forming mechanism that generates most of our non-reflective beliefs and System 2 (the slow system) which we can utilize with effort and which reaches more accurate conclusions after some deliberation. Next, I consider results from evolutionary analyses that concur with Kahneman in many ways but which I argue call for far more skeptical conclusions than Kahneman settles on.

#### DEEP SOUTH PHILOSOPHY & NEUROSCIENCE WORKSHOP: PRESENTATION ABSTRACTS

(In alphabetical order, by (first) speakers' last names)

The Cincinnati water maze in the making (Session 4, Friday 12:30–1:45 p.m.)

Nina Atanasova (Philosophy, University of Toledo: nina.atanasova@utoldeo.edu)

Charles V. Vorhees (Neurology, Core, Cincinnati Children's Hospital, and Pediatrics, University of Cincinnati College of Medicine)

Michael T. Williams (Neurology, Cincinnati Children's Hospital, and Pediatrics, University of Cincinnati College of Medicine)

In this project, we adopt integrated methodology in presenting a case-study from experimental neuroscience. It exemplifies the interplay between theory, experiment, and technology. We show that, contrary to traditional accounts of science, tool-development and experiment rather that theory drive scientific change. Our collaboration aims at providing a comprehensive account of the invention and development of an experimental apparatus, the Cincinnati Water Maze (CWM), which was invented and has been continuously developed in the Vorhees/Williams Neurology Lab at Cincinnati Children's Research Foundation. In this paper, we detail the key steps in the development of the CWM. We trace the solutions to epistemic problems against the background of material and institutional constraints. We show that the invention and development of the CWM is a clear case in which tool-development advances independently from theory.

Imaging the living brain: Reductionism revisited in times of dynamical systems (Session 9, Saturday 10:25 a.m.–12:25 p.m.)

Ann-Sophie Barwich (History and Philosophy of Science, and Cognitive Science, Indiana University: abarwich@iu.edu)

A recent invention by the Hillman lab at Columbia introduced SCAPE (Swept, Confocally-Aligned Planar Excitation microscopy), a tool for 3-dimensional, rapid live-stream imaging of small living, freely moving organisms and entire brains of larger animals. This and other breakthrough procedures initiate a shift in disciplinary outlook: since the 1980s, neuroscience grew divided into two camps; computational modelers and molecular bench workers. I argue for a theoretical revolution embodied by modern real-time molecular imagining tools. Cellular mechanisms no longer provide mere details to supply higher-level computational models of physiological processes, but constitute the material foundation from which to derive neuroscientific theories. Against fashionable anti-mechanism and anti-reductionism talk by philosophers, my talk shows that modeling of dynamical systems in neuroscience cannot proceed without a revised and detailed conception of reductionism, which yields mechanistic explanations as contingent on ongoing updates of molecular dynamics.

Feminist standpoint as a tool for cognitive neuroscience (Session 2, Friday 9:55–11:10 a.m.)

Vanessa Bentley (Philosophy, University of Alabama, Birmingham: <a href="mailto:vbentley@uab.edu">vbentley@uab.edu</a>)

I develop a feminist standpoint framework for cognitive neuroscience using the neuroimaging of sex/gender differences as a case study. Feminist standpoint epistemology involves a new scientific mindset, starting from the lives of the oppressed, subordinate, marginalized, or neglected. Once we initiate inquiry from the perspective of nondominant lives, we can reflect on the differences between the lived experiences of individuals from the dominant group as compared to those from nondominant groups and incorporate the interests of nondominant groups in the research. Revisions to scientific practice may involve changing: (1) the research question; (2) the experimental set-up, data collection, or analysis; or (3) the standards for the interpretation and dissemination of results. Thus, the feminist standpoint can be a valuable tool to reinvigorate and redirect research on the neuroscience of sex/gender to provide less partial and distorted knowledge and knowledge that is liberatory rather than oppressive.

"Theory has had only a modest amount to do with the building of these ingenious devises...It is engineering that counts" (Session 6, Friday 3:20–4:35 p.m.)

John Bickle (Philosophy, Psychology, Mississippi State University, and Neurobiology and Anatomical Sciences, University of Mississippi Medical Center: <a href="mailto:jbickle@philrel.msstate.edu">jbickle@philrel.msstate.edu</a>)

My title is a quote from Ian Hacking concerning microscopes, part of his famous argument for the relatively independent "life" of experiment from theory. In this talk I will show that Hacking's point generalizes beautifully to the "building" (development) of the experiment tools that revolutionized contemporary neuroscience, including the metal microelectrode, the patch clamp, gene targeting techniques, and optogenetics/DREADDs (Designer Receptors Exclusively Activated by Designer Drugs). The development of each of these tools not only reveals a common pattern, but also the primacy of engineering concerns and problems. These facts about experiment tool development, coupled with the contemporary prominence of the laboratory life sciences within science as a human institution, puts theory "in its place": as tertiary in both importance and dependency, to the development of experiment tools, and the latter to engineering concerns and solutions.

#### **Decoding analyses and neural representation** (Session 7, Friday 4:45–6:45 p.m.)

Dan Burnston (Philosophy and Tulane Brain Institute, Tulane University: <a href="mailto:dburnsto@tulane.edu">dburnsto@tulane.edu</a>)

Decoding techniques are highly useful data analysis tools. When one employs a decoder one starts with a multi-variate data set—i.e., patterns of variation across a potentially wide array of variables—and uses these patterns to predict experimental variables. Shea has argued that decoding methods can be used to establish the *representational content* of neural activity. I will discuss two reasons for skepticism about this. First: due to the correlational nature of the prediction, any dynamic property which correlates with the experimental variable will allow for successful prediction, even in cases where it is obvious that the dynamics do not represent that property. Second: the ability to predict environmental information from a neural population does not mean that content is a distinct causal quantity in the system. I articulate these problems with examples from primate physiology.

#### Can tool development solve neuroscience's data integration problem? (Session 5, Friday 1:55–3:10 p.m.)

David Colaço (Philosophy, Mississippi State University: djc60@pitt.edu)

The BRAIN Initiative has amounted to a massive investment to innovate our study of the brain. Unlike other big neuroscience projects, this initiative aims to develop tools rather than models. Why is this the case? In this talk, I investigate one answer to this question: novel tools can be used to integrate data collected at different neural "scales." This strategy has promise, I argue, because these scales are inextricably tied to tool use. Rather than simply reflecting levels of organization, researchers' conceptions of neural scales are vestiges of the limitations of past tools used to investigate the brain. Thus, it stands to reason that changing these tools can change how these scales are conceived. With this in mind, I investigate how tools in neuroscience are both a cause of and a solution to the problem of integrating neural scales.

### Artifacts and scientific realism (Session 6, Friday 3:20–4:35 p.m.)

Carl Craver (Philosophy and Philosophy-Neuroscience-Psychology, Washington University in St. Louis: <a href="mailto:ccraver@wustl.edu">ccraver@wustl.edu</a>)

Can a constructive empiricist make sense of the importance of artifacts in the epistemology of experimental science? One guiding desideratum in experimental practice and tool development is the avoidance of artifacts. Building on a few isolated discussions in philosophy (Boyd 1988; Weber

2000) and using several examples from the history of biological science, I offer an analysis of experimental artifacts. I also provide a taxonomy of artifacts arriving at different stages of experimental practice. I argue that the idea of an artifact resists translation into the language of empirical adequacy. This is precisely because the desideratum just is the demand for epistemic contact with reality (as opposed to our artifact, directly or indirectly). I consider some possible translations of this sort and argue that none convincingly captures the epistemic significance of artifacts to the evaluation of experiments and tools.

#### Multielectrode arrays as a case study in tools driving new concepts in neuroscience (Session 8, Saturday 8:15–10:15 a.m.)

Luis Favela (Philosophy and Cognitive Science, University of Central Florida: luis.favela@ucf.edu) John Begss (Physics, Indiana University: jmbeggs@indiana.edu)

Increases in the spatial and temporal resolution of data obtained from neuronal activity are largely enabled by technological innovations, for example, single neurons integrating inputs from thousands of other neurons and then distributing energy back to the network. Revealing this neuronal avalanche behavior required technology able to capture particular spatial and temporal distributions, specifically, multielectrode arrays. Accordingly, such experimental work can be viewed as a tool-driven advance in our understanding of neurophysiology. However, such experimental work is also a concept-driven advance as well, in that such phenomena are more accurately explained and understood by concepts and theories not typically employed in contemporary neuroscience. Neuronal avalanches demonstrate features commonly found in complex systems, for example, criticality, emergence, nonlinearity, and self-organization. Though some try to fit such features into more traditional frameworks, others realize the necessity of importing new concepts and theories into neuroscience.

# Making neural networks neural again: What bio-inspired computational models teach us about multiple realization (Session 1, Friday 8:30–9:45 a.m.)

Mahi Hardalupas (History and Philosophy of Science, University of Pittsburgh, email: mch64@pitt.edu)

Recently, several cognitive computational neuroscientists have been enthusiastic about the use of deep neural networks as a tool for understanding the brain (Kriegeskorte, 2015; Yamins & Dicarlo, 2016). In this talk, I consider this interest in bio-inspired computational modelling and explore its implications on the multiple realisation debate. First, I motivate the need for a new kind of engineered multiple realisation, which recognises the importance of engineering practices to neuroscience. Secondly, by examining different approaches to building bio-inspired neural networks, I show that these cases of engineered multiple realisation fail to support the metaphysical conclusions typically attributed to the traditional multiple realisation thesis. To conclude, I sketch some advantages of an engineered multiple realisation framework.

# Exploratory concept formation and tool development in neuroscience: The case of "bug detectors" and the "default mode" of brain function (Session 8, Saturday 8:15–10:15 a.m.)

Philipp Haueis (Philosophy, Bielefeld University (Germany): <a href="mailto:philipp.haueis@uni-bielefeld.de">philipp.haueis@uni-bielefeld.de</a>)

In this paper, I analyse two neuroscientific cases to argue that tool development and concept formation often go hand in hand in exploratory experiments in neuroscience. The first case is the exploratory formation of the concept of "bug detectors" in the frog eye (Lettvin et al. 1959). In this case conceptual development was made possible in part by the development of a new *tool*: platinum black-tipped microelectrodes. However, the concept of "bug detectors" also had a long-lasting impact on how electrophysiologists conceptualized brain functions (Barlow 1972). The

second case is exploratory formation of the concept of a "default mode" of brain function (Raichle et al. 2001). This concept enabled both the development of resting state functional connectivity studies as a novel tool in neuroimaging, and the discovery of the default mode *network* as an unknown brain system which can be studied using that tool (Greicius et al. 2003). The two cases show that tool development often lies at the exploratory origin of novel concepts ("bug detector"), and that exploratory concept formation can also fuel further tool development ("default mode").

#### A model for generating new laboratory tools (Session 10, Saturday 1:00–3:00 p.m.)

Patrick Hopkins (Philosophy, Millsaps College, and Center for Bioethics and Medical Humanities, University of Mississippi Medical Center: <a href="https://hopkipd@millsaps.edu">hopkipd@millsaps.edu</a>)

If a major source of progress in neuroscience is developing experimental tools, the process by which tools develop needs investigation and best practices promotion. A potential model for this could make use of two major ideas in other fields. The *problem of analogical transfer*—humans are bad at transferring a solution from one domain to another, even when the structural problems and solutions are strongly analogous, so experimenters may not realize that a technical problem has already been solved in another context. The *Lead User Method* (used in new product development)—dissatisfied customers who end up jury-rigging existing products are often more useful sources for solving problems than top-down design. Combine these two ideas and we could potentially create a model for solving laboratory problems that abstracts structural lab problems out of their semantic and biological context, finds analogous problems in other fields, and adapts those solutions back into the lab.

# Tools, experiments, hypotheses, and descriptions: An examination of Bickle's "Revolutions in neuroscience" (Session 10, Saturday 1:00–3:00 p.m.)

Gregory Johnson (Philosophy, Mississippi State University, Meridian: <a href="mailto:gregory.johson@msstate.edu">gregory.johson@msstate.edu</a>)

Bickle argues that theory is of "tertiary, not primary, importance" in contemporary neurobiology (2019, p. 2). This claim can be understood in two ways. On the one hand, theories depend for their confirmation on experiments and those experiments employ certain tools and techniques. Hence, without those tools, the theory would fail to be confirmed. This is consistent with our general understanding of scientific practice. Alternatively, the claim can be taken to mean that the temporal order of events is, as Bickle puts it, "engineering solutions  $\rightarrow$  new experiment tools  $\rightarrow$  better theory" (2019, p. 19). I examine the reports of several experiments in neurobiology and find that some conform to the first reading only, some to the second, and some appear to eschew theory altogether and employ a method that is closer to *engineering concerns*  $\rightarrow$  *development of new experimental tools*  $\rightarrow$  *description*.

### Auto-experimentation: Essential, foolhardy or both? (Session 3, Friday 11:20 a.m.–12:00 p.m.)

Brian Keeley (Philosophy, Pitzer College: <a href="mailto:Brian\_Keeley@pitzer.edu">Brian\_Keeley@pitzer.edu</a>)

What do the following neuroscientists, experimental psychologists & biologists have in common: Jan Evangelista Purkinje, Johannes Müller, Henry Head, Alexander von Humboldt, Horace Wells, J.B.S Haldane, and Ernst Mach? All made important discoveries about the nervous system and human physiology more generally by performing experiments upon themselves. For example, dentist Horace Wells developed nitrous oxide as a surgical anesthetic by using it while having his own tooth extracted. Mach explored the function of the inner ear by subjecting himself to numerous vertigo-inducing bouts in spinning machines, comparing his experiences to those reported by Purkinje when the earlier scientist

reported the results of passing electrical currents through his own head. Henry Head mapped and differentiated somatosensory sub-modalities (light touch, warmth, cold, etc.) by having his own sensory nerves transected and then making careful observations over years as the peripheral nerves regrew and sensation returned. What issues arise from the practice of auto-experimentation? What are relevant theoretical and philosophical advantages and disadvantages of conducting experiments, sometimes potentially fatal or irrevocably damaging, on one's own nervous system? I argue that, particularly in the realm of sensory physiology, data derived from auto-experimentation can and has played an essential role in theory development.

#### Analog-digital modulation of synaptic transmission (Session 1, Friday 8:30–9:45 a.m.)

Corey Maley (Philosophy, University of Kansas: <a href="mailto:cmaley@ku.edu">cmaley@ku.edu</a>)

The "all-or-none" principle of neural firing has it that neural spikes are much like the bits of a digital computer: they are either present or absent, on or off. This picture is beginning to change, and may have profound implications for how we think about neural information and computation. In the last 15 years, researchers have shown that a variety of neurons generate action potentials whose precise waveforms have significant postsynaptic effects: rather than being all-or-nothing, their shape matters. These results are due to new experimental techniques, but perhaps also due to an entrenched belief in the superiority of the digital over the analog, a belief also found in the shift from analog to digital computation beginning in the 1960s. Realizing that neurons traffic in analog signals not only rehabilitates the idea that brains compute, it may also change how we understand the nature of neural information processing.

# New predictive tools in neuroscience: A 'diet' mechanistic perspective (Session 9, Saturday 10:25 a.m.–12:25 p.m.) Marco Nathan (Philosophy, University of Denver: marco.nathan@du.edu)

Prediction has become a central player in the current theoretical landscape, leading various pundits to speak of an ongoing 'predictive turn' within the cognitive neurosciences. Unfortunately, the mainstream causal-mechanistic approach, now dominant in the philosophy of neuroscience, is poorly equipped to deal with predictive tools. The goal of this paper is to offer a diagnosis and explore a solution. Whether or not mechanisms exist as an ontological category, I maintain, they do not correspond to the epistemic constructs at the heart of scientific representation. Rather, mechanisms stand in for entities producing phenomena. I humorously refer to my approach as a diet mechanistic philosophy®, with all the refreshing epistemic flavor of traditional views, but none of those hefty ontological calories.

### **Observing neural representations using multiple methods and tools** (Session 7, Friday 4:45–6:45 p.m.)

Gualtiero Piccinini (Philosophy, University of Missouri, St. Louis: piccininig@umsl.edu)

Neural representations are simulations of the organism and environment built by the nervous system. I will provide an account of representational role and content for both indicative and imperative representations. I also argue that, contrary to a mainstream assumption, representations are not merely theoretical posits. Instead, neural representations are observable and are routinely observed and manipulated by experimental neuroscientists in their laboratories using multiple methods and tools. While much empirical and conceptual work is still needed to fully understand neural representations and all that they can explain, one conclusion is safe. Using a variety of methods, neuroscientists have empirically discovered that some of the complex neural states interleaved between behavior and their environments are representations. Neural representations are

observable, quantifiable, manipulable, and have received multiple independent lines of empirical support. Therefore, neural representations are real—as real as neurons, action potentials, and other entities routinely observed and manipulated in the laboratory.

The silent engram (Session 8, Saturday 8:15–10:15 a.m.)

Sarah Robins (Philosophy, University of Kansas: skrobins@ku.edu)

Recently, Josselyn, Köhler, and Frankland claimed that "not only can contemporary rodent studies claim to have found the engram, but also have identified means to control it" (*Nature Reviews Neuroscience*, 2015: 531). Their optimism comes largely from the progress brought on by the use of optogenetics to identify and intervene in memories at the neurobiological level. In this paper, I explore Tonegawa and colleagues (2018) claim to have used optogenetic techniques to support the traditional view of systems consolidation in memory. Critically, their account involves positing *silent engrams*: neurons that carry information (as a standard engram does) but in an immature, inactive state such that they can only be activated by optogenetic intervention. Silent engrams are an intriguing, if puzzling, addition to our understanding of the molecular mechanisms of memory. Here I explore the curious features of this newly proposed entity and the implications of its addition to our explanation of systems consolidation.

Tracer and tagging experiments in neuroscience (Session 9, Saturday 10:25 a.m.–12:25 p.m.)

Lauren Ross (Logic and Philosophy of Science, University of California, Irvine: rossl@uci.edu)

This talk explores how tags and tracers are used as tools in neuroscience research. These tools often involve attaching some identifiable "tracer" (typically a dye or radioactive material) to an identifiable component, which is monitored as it flows through a causal process. These tools are often used in neuroanatomical tract tracing studies, which aim to uncover the anatomical connections among sets of neurons in brain and spinal tissue. This talk explores three main questions regarding the use of tags and tracer as tools in neuroscience: (1) First, what exactly do these methods involve and how do they work? (2) Second, what do these tools uncover and why does this matter from a philosophical perspective? (3) Third, if these tools are used to produce maps of causal connections, what scientific questions do these maps address?

Visual experience and the creation of neuroimaging (Session 2, Friday 9:55–11:10 a.m.)

Rick Shang (Philosophy-Neuroscience-Psychology, Washington University in St. Louis: zshang@wustl.edu)

Scientists and philosophers are often not impressed by the general public's interest in the visual experience of neuroimaging. Although the general public is often excited to see our brains "activating" or "lighting up" in real time, scientists and philosophers point out that such visual experiences have limited, if at all, evidential value in neuroimaging. This presentation disputes this view. I argue that visual experience played a central and perhaps indispensable role in the history of neuroimaging. In particular, visual experience provided the initial evidence and methodological inspiration for the subtraction method.

Can rodent iPADs advance our understanding of cognition? Session 4, Friday 12:30–1:45 p.m.)

Jacqueline Sullivan (Philosophy and Rowman Institute, University of Western Ontario: jasst12@gmail.com)

In areas of neuroscience that investigate cognition, the development of innovative and reliable cognitive testing tools is equally as important as the development of tools for successfully intervening in, visualizing and decoding brain activity. In this talk, I critically evaluate one such state-of-the-art cognitive testing tool: the *Bussey-Saksida Rodent Operant Touchscreen Chamber*. I make that case that the apparatus far surpasses

conventional techniques for evaluating cognition and its mechanisms in rodents with respect to the wide variety of types of cognitive processes it may be used to assess and the ingenuity and rigor that using it in combination with novel intervention, visualization and data analysis tools demands. Analyzing the development and refinement of touchscreen tasks in experimental contexts, I argue, sheds novel light on the correct ingredients for advancing our understanding of cognition and its mechanisms.

### Triangulation in the technological and informational explosion in neuropsychiatry (Session 5, Friday 1:55–3:10 p.m.)

Antonella Tramacere (Max Planck Institute for the Science of Human History, Jena (Germany): <a href="mailto:atramacere@gmail.com">atramacere@gmail.com</a>)

An increasing number of tools have been developed to investigate the molecular and cellular components of brain mechanisms. These investigations are producing an enormous amount of data. I call this phenomenon *the technological and informational explosion in neuropsychiatry*. As a consequence of this explosion, successful integration of research results is a challenge both within and across sub-fields. Results of experiments are hardly generalizable, and not easily connected together to identify neurobiological mechanisms of mental dysfunctions. I propose *triangulation* as a useful tool for integration. Triangulation is the practice of obtaining scientific validity by using different approaches, where each approach has different key sources of potential bias unrelated to each other. Triangulation can help to analyze, and supply to the intrinsic limitations of each technique for the investigation of different correlates of brain functions and structure. As consequence, it is instrumental to select valid results to integrate across different subfields of neuropsychiatry.

#### **Data mining the brain to decode the mind** (Session 7, Friday 4:45–6:45 p.m.)

Daniel Weiskopf (Philosophy and Neuroscience Institute, Georgia State University, email: <a href="mailto:dweiskopf@gsu.edu">dweiskopf@gsu.edu</a>)

Machine learning techniques are increasingly being used within neuroscience. Here I address the application of one such technique, multivariate pattern analysis (MVPA), to the problem of reverse inference. I argue that MVPA does not provide a new solution to the problem, and that the technique faces interpretive problems of its own. MVPA methods are oversensitive to factors besides the ground truths of neural activation. They require careful model choice and parameter tuning to establish a desirable stability/accuracy tradeoff. They cannot serve as causal or processing models, and so don't shed light on the function of the areas that they pick out. Finally, the epistemic setting of MVPA and other "decoding" methods contributes to a worrisome shift towards prediction and away from explanation in fundamental neuroscience. MVPA is a powerful predictive tool, but not one well-suited to establish the functional claims that reverse inference has traditionally rested on.