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International Association for Computing and Philosophy

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From Tony Beavers, IACAP President

Dear IACAP Members and Friends,

It is with great pleasure that I have this opportunity to write you for the first time. Before saying more, however, I'd like to thank Luciano Floridi for his stewardship over the past six years. He has significantly helped to keep us on the track toward opening the association to free elections, encouraging graduate student involvement, improving the quality of our conferences, and making the organization more visible.

Following last year's elections, we remain in transition where the executive board is concerned. As you may remember, we voted to rotate one third of the board each year. This is the second year of that process, during which we will receive a new executive director and a new treasurer. Pat Lin has graciously stepped in for a one year, acting position as executive director to help keep the ship afloat, and Charlie Ess is retiring from the treasurer's position after more years than I can remember. I wish to express a special word of thanks to both of these members as well.

Charlie Ess also oversaw our first International Conference at the University of Aarhus in Denmark this past July, with the help of Ruth Hagengruber. The event was well attended and quite successful. There are many positive things to say about the conference, but most visible to me is that the organization is getting younger and more international. Many thanks to all involved (speakers included!) for making this event so successful. I should also note that Charlie played a great host in a wonderful city.

Planning for next year's joint World Congress with the AISB is moving along well. Current keynote speakers include Colin Allen, Luciano Floridi, and Stephen Wolfram. The event will be held at the University of Birmingham in England during the first week of July as part of the Turing Centenary celebration. So, please plan accordingly. As an added incentive to what promises to be a great event, the joint AISB/IACAP planning committee has been working with the Alan Turing Year Art and Culture Subcommittee to include an artistic component, and we are working to add an optional trip to Bletchley Park for anyone interested.

Finally, one last order of business, in Aarhus the board voted to add three at-large, voting positions to the executive board to help bring additional voices to the table. It was stipulated that one of these should go to a graduate student. The at-large positions are being worked into the election cycle now.

Many thanks to all for a great year and thanks, as well, for putting me in this office. I look forward to continuing my service over the next two years.

Yours,

Tony Beavers
President, IACAP

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Group for Logic & Formal Semantics

Under the informal rubric of the Group for Logic & Formal Semantics in the Department of Philosophy of Stony Brook, Patrick Grim has worked with an overlapping series of collaborators in pursuing a chain of related research projects at the interface of computing and philosophy.

Over time the projects have developed from applications of computer modeling and chaos theory to issues in infinite-value logic and paradox, to explorations by way of cellular automata of issues of egoism and altruism in social and political philosophy, to modeling the emergence of semantics and pragmatics under the umbrella of philosophy of language. Similar tools were used to construct a game-theoretic model of prejudice reduction and the social-psychological contact hypothesis. From that point the research trajectory has concentrated on computational modeling of social networks, with philosophical applications in scientific optimization and social epistemology and practical implications in modeling belief dynamics relevant to addressing racial and ethnic health care disparities

Grim's collaborators have included faculty, graduate, and undergraduate students in philosophy and computer science at Stony Brook, graduates and undergraduates in the Center for Study of Complex Systems and philosophy at the University of Michigan, and fellow researchers within epidemiological modeling in the Graduate School for Public Health at the University of Pittsburgh. As an indication of the interdisciplinary character of research strategies, results have been published in a variety of sources not only in philosophy but in theoretical linguistics, theoretical biology, artificial life and computer science.

The earliest work of the Group for Logic & Formal Semantics was with Gary Mar and Paul St. Denis, modeling the dynamics of paradox. The traditional Liar says

This sentence is false,

and forces an oscillational pattern of reflective revision between 'true' and 'false': If it's true, it must be false, if false it must be true... A sample of Grim, Mar, and St. Denis's work is identification of a Chaotic Liar,

This sentence is precisely as false as you think it is true.

Within an infinite-valued logic, the semantic behavior of the Chaotic Liar is not merely oscillatory but provably chaotic on a $[0,1]$ interval of values (Grim & Mar, 1991, Grim, Mar, Neiger, & St. Denis, 1993; Grim 1993). That work was taken further into formal undecidability results regarding chaos itself and fractal images of formal systems (Grim & St. Denis, 1997).

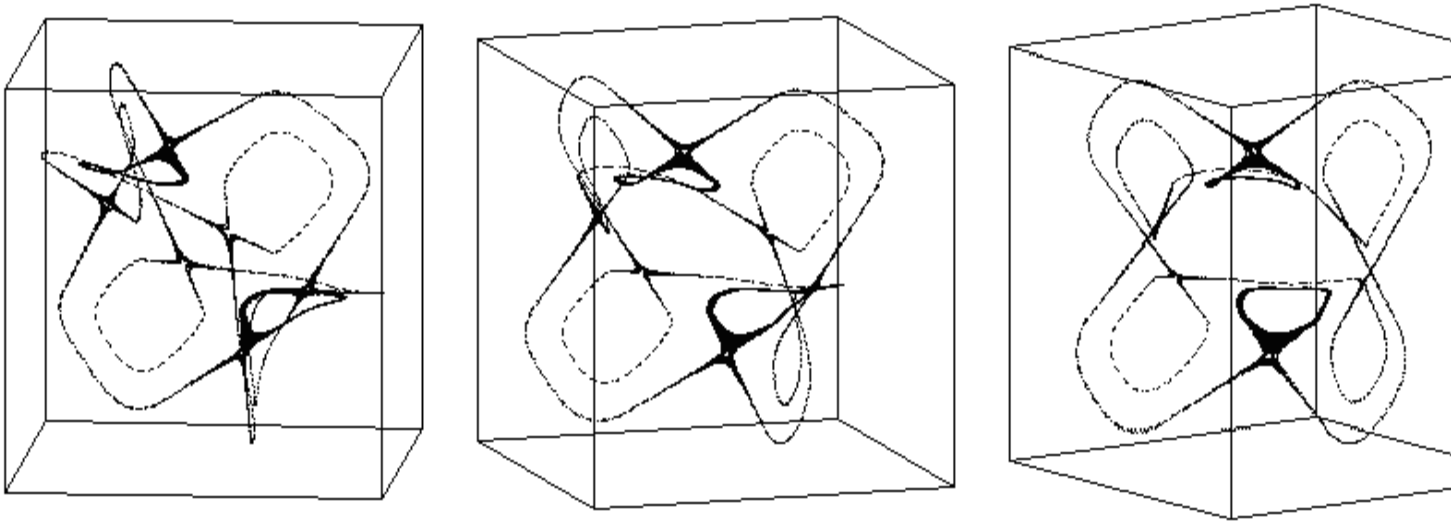


Fig. 1. Paradoxical behavior of three mutually referential sentences. Grim, Mar, & St. Denis (1998)

From there concentration of the group turned to game theory, and specifically to spatialized game theory: instantiation of networks of interactive game-theoretic agents in the manner of cellular automata. Spatialized game theory drops an assumption common to both classical and evolutionary game theory: that all agents play with all others in a population. In a more realistic spatialized instantiation, agents play only with immediate neighbors, altering strategies in accord with results from purely local play. That change, it turns out, greatly favors the emergence of cooperation in ways of interest in biology, political science, and social and political philosophy (Grim 1995, 1996). Building on results from John Conway, such an approach also allows proof of formal undecidability results regarding spatialized game theory itself (Grim 1997). The early logical and game-theoretic work of the early Group for Logic & Formal Semantics is collected in *The Philosophical Computer* (Grim, Mar, & St. Denis 1998).

Working with Ali Alai-Tafti, Trina Kokalis, Nick Kilb, and Paul St. Denis, Grim applied earlier tools to questions in philosophy of language regarding the emergence of language. Within a spatialized environment of wandering food sources and predators, the group was able to show the clear and robust emergence of communication: the growth of groups of agents using and reacting to initially arbitrary sounds as indicators of food or warnings of predators. In an extended series of studies, it becomes clear that communication emerges by means of any of a range of mechanisms by which agents update on the behavior of their neighbors: simple imitation, localized genetic algorithm, and the training of simple neural nets (Grim, Kokalis, Tafti, & Kilb 2000, 2001; Grim, St. Denis, & Kokalis 2003, 2004; Grim, Kokalis, Alai-Tafti, Kilb, and St. Denis 2004; Grim, Wardach, & Beltrani 2006). In later studies it was shown that emergence of communication is further favored by the variability of resources and threats in such an environment: by a history of cycles of 'boom and bust' that seem to have characterized aspects of both biological and social evolution (Grim & Kokalis 2004, 2006). In very recent work, Grim has gone on to show that the same mechanisms that can account for emergence of

elementary semantics can account for emergence of pragmatic behavior in accord with the Gricean maxims (Grim, forthcoming).

With a new team of investigators, the research focus shifted to spatialized game-theoretic modeling of prejudice reduction, with specific attention to the contact hypothesis in social psychology. Stemming from work by Allport in the 1950s, the hypothesis is that prejudice between groups will be reduced with increased contact between them. Despite widespread empirical confirmation, there is no consensus within the social psychological community as to the mechanism involved. Here the work of the group showed that simple game-theoretic advantage was sufficient to produce a similar effect, even for agents far too simple to instantiate the cognitive complexities usually appealed to in the literature (Grim, Selinger, Braynen, Rosenberger, Au, Louie, & Connolly 2004, 2005). It was on the basis of that work that the group was also able to develop a 3-dimensional graphic metric for robustness across game-theoretic matrices (Grim, Au, Louie, Rosenberger, Braynen, Selinger, and Eason 2006, 2008).

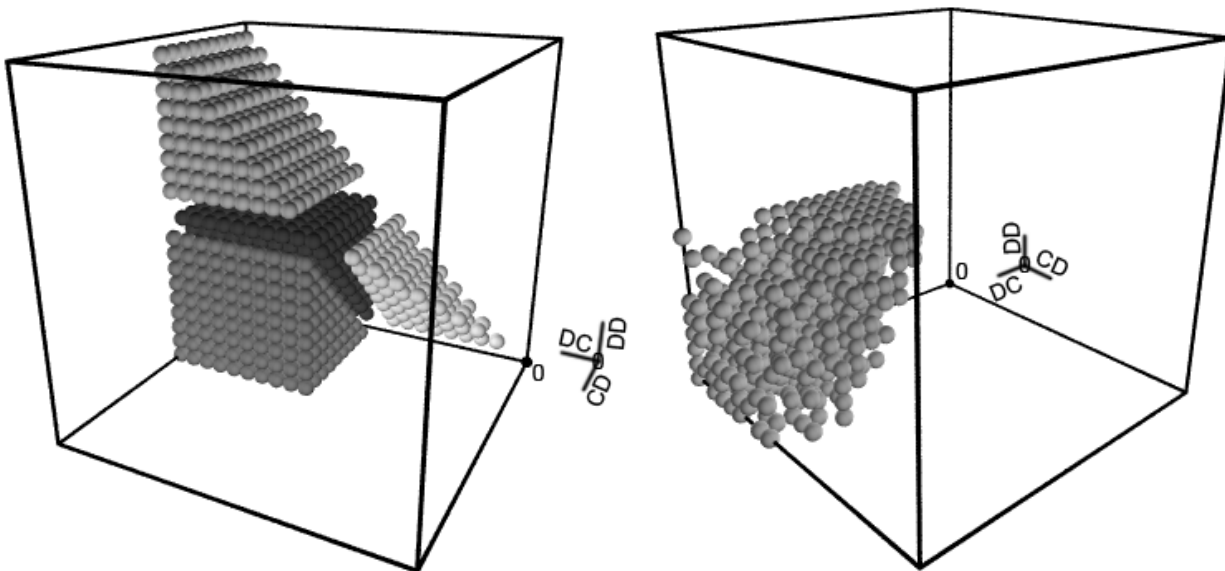


Figure 2 A model for robustness across the universe of 2x2 game theory, applied to an effect on prejudice reduction. Grim, Au, Louie, Rosenberger, Braynen, Selinger, and Eason 2006, 2008.

Most recently the group has expanded its work in spatialized social modeling to theoretical issues in epistemology and philosophy of science and to questions of belief dynamics of practical importance for epidemiology. What form of network of investigators will be optimal in finding the best hypothesis, and for what kind of question? For epistemic landscapes in which the best result is hidden, given some basic assumptions regarding updating, it turns out that full and instantaneous communication of results between all investigators is not optimal. For those kinds of questions, a distributed network of investigators more like 16th century science and less like the world-wide web turns out to be superior. In retrospect, parallels to these results have been explored in expanding the group's earlier work in cooperation and communication to a wider range of network structures (Grim 2008, 2009a, b).

The Group for Logic & Formal Semantics has also recently been involved with the MIDAS (Models of Infections Disease Agent Study) group, funded by NIH, at the University of Pittsburgh and elsewhere. Here the attempt is to apply lessons learned from the epistemic and network modeling, in order to understand the dynamics of health-care beliefs and behaviors across communities, particularly with attention to minority communities and well-known ethnic and racial disparities in health care (Grim et. al. 2009; Grim 2010).

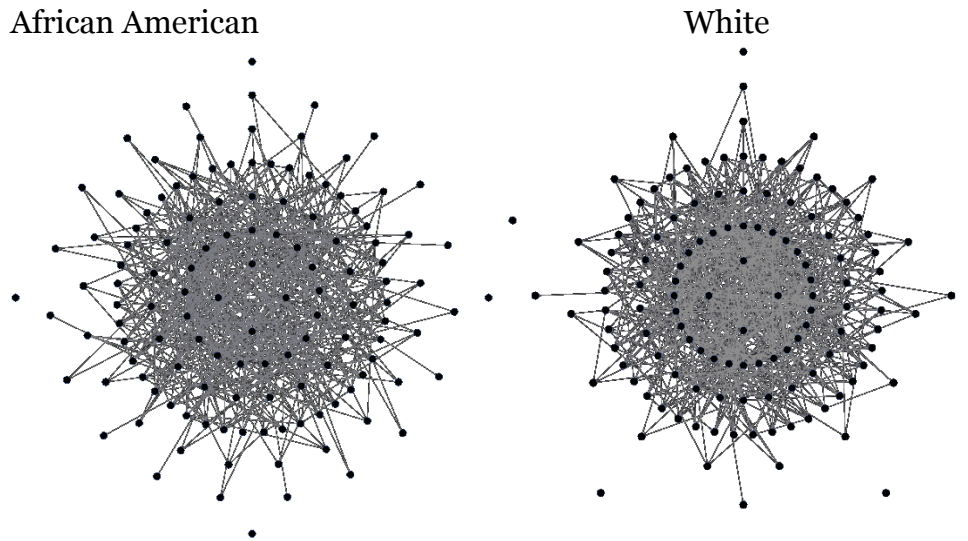


Figure 3 Artificial networks constructed to match degree distributions drawn from data within the African American and White communities. Grim et. al. 2009; Grim 2010

The research trajectory of the Group for Logic & Formal Semantics has been diverse and perhaps a bit wandering, interfacing at various times with linguistics, political science, theoretical biology, economics, computer science, and epidemiology. Its techniques have quite generally been those of computational modeling, developed form models again borrowed from a range of different disciplines. Throughout, however, the work of the group has had one foot firmly planted in traditional philosophical concerns: logic, social and political philosophy, philosophy of language, and epistemology.

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Organizational Secretary's Report: 2010-2011

Notable expenditures:

IACAP travel award, Epistemology of Modeling and Simulation Conference (April, 2011, Pittsburgh, PA, USA) to Catherine Stinson, \$500.00

Travel Bursaries for IACAP'11, to Israel Belfer (Israel), Richard Heersmink (Australia) , Steve McKinlay (New Zealand), Naveen Sundar (USA), Andreas Weich (Germany) five total @ \$500.00 each.

Travel bursary for IACAP'11 to Cameron Buckner (USA) - \$1,500.00

Total bursaries:

2010-2011: \$3,500.00

Final accounting for IACAP'11 is not yet complete, but my best estimate is that the conference ran with a slight surplus.

Current memberships (i.e., paid since 16 August, 2010): 45

Current balances:	Paypal – 7660.90
	Drury - <u>3200.95</u>
Total:	10,861.85

Respectfully submitted,
Charles M. Ess
Organizational Secretary
Founding / Lifetime member, IACAP

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IACAP'11: Local Organizer's Report

IACAP'11 – celebrating 25 years of CAP conferences – was held in the auditoriums and classrooms of the Theology Building of Aarhus University (AU), July 4-6, 2011.

The conference theme, “The Computational Turn: Past, Presents, and Futures” was intended in the first instance to encourage review and celebration of the accomplishments clustering about a quarter-century of conferences devoted to exploring the extensive range of intersections between computing and philosophy that have emerged with the rapid development and diffusion of computing devices – while at the same time gathering the best of contemporary work and making our best effort to discern future trajectories of further research and reflection.

IACAP'11 was generously sponsored by Aarhus University and the AU Department of Information- and Media Studies (IMV). The conference attracted nearly 100 participants from 18 countries. For the first time in our history, IACAP'11 provided travel bursaries to the PhD and post-doctoral students who authored the best papers (as judged by a selection committee chaired by Dr. Johnny Søraker, who also served as our webmaster). These bursaries helped boost conference attendance by such scholars, who made up ca. 30% of our participants. We further enjoyed an unusually high participation by women scholars and researchers (at least in light of the historically very low percentages of women students and colleagues to be found in philosophy and computing) – ca. 17%.

Our conference tone was nicely established at the outset by Dr. Anne Marie Pahuus, Vice-Dean for Research and Talent Development and former head of the AU Philosophy and History of Ideas Department, who officially opened the conference. In her words of welcome, Dr. Pahuus highlighted the strong traditions and future directions of AU's exceptional commitment to the sorts of interdisciplinary explorations at the core of the CAP conferences, making the point that AU provided an unusually supportive environment for IACAP'11. IMV Head of Department Steffen Ejnar Brandorff offered additional words of welcome at both the opening reception on Monday evening and at the conference dinner on Tuesday evening.

Our opening keynote address was given by IACAP President Tony Beavers on the topic “Is Ethics Computable, Or What Other than Can Does Ought Imply?” Tony's talk set the tone, model, and bar of excellence for our subsequent, equally excellent keynote addresses from Terrell Ward Bynum, Katja Franko Aas, John Sullins, and Cameron Buckner. Collectively, our keynotes gave us a rich palette of historical review, contemporary reflections on especially knotty problems, and inspiring anticipations of future research directions across the spectrum of CAP topics and issues. (For title and abstracts, please see the conference web page, <<http://www.iacap.org/conferences/past-conferences/iacap11/>>.

My own experience with the CAP conferences goes back to 1989 – first as a participant and then as an active member of program committees, etc. Starting in 1997, I have been directly responsible as a conference organizer for the CATaC (Cultural Attitudes towards Technology and Communication), AoIR (Association of Internet Researchers), and E-CAP conferences. With IACAP'11, I was greatly assisted throughout by the hard work and collective wisdom of the IACAP Executive Committee, the IACAP'11 Organizing Committee, and our Program Chair, Dr. Ruth Hagengruber. In particular, Philip Brey's ECAP planning document provided us with an exquisitely detailed budget and timeframe, based

on his own extensive experience with ECAP conference organization: at several points through the planning process, I found Philip's document to be a lifesaver. In addition, Dr. Hagengruber and her department (University of Paderborn, Germany) generously sponsored the printing of our conference Proceedings. Finally, in the last weeks and throughout the conference, visiting PhD student Jeremy John Mauger, fresh from his conference experience with CEPE, provided much needed attention to innumerable details as well as the boundless energy and good cheer needed for us to complete the thousand tasks required for the conference to run well.

As a result, while I've had the pleasure of working with a good many, simply first-rate conferences - I can say that IACAP'11 ran more smoothly than any other conference in my experience. These colleagues thus deserve great credit for the successes of IACAP'11, beginning with its logistical and financial dimensions – but certainly also extending to its substance.

Substantively, from my perspective, IACAP'11 succeeded in its aspirations to commemorate and celebrate 25 years of CAP conferences. First of all, we appear to have managed to once again recreate and sustain our trademark mix of critical but cordial collegiality, practiced and reinforced through much informal time together over coffee, tea, and good meals. The latter most notably included our conference dinner at Nordens Folkekøkken, whose chefs and staff managed to present over 60 of us with exquisite examples of new Scandinavian cuisine, including carefully matched wines, all in a characteristically *hyggelig* (“cozy”) Danish atmosphere. The Danish “twilight nights” (*lyse natter*) – with sunsets so late, sunrises so early, and the sun dipping so low under the horizon that it never becomes truly dark – also encouraged many conference participants to explore and enjoy other delights and locales of Aarhus, without too much detriment to their participation and presentation the following day.

Indeed, secondly, I consistently received comments from participants regarding the high quality of conference presentations. These comments were echoed by several track chairs who remarked with no little pride and pleasure as to how substantive and fruitful the contributions to their tracks were – and that with an unusual uniformity. Hence our thanks to the IACAP'11 conference participants – both for the quality of their conference presentations and for their sustaining IACAP's crucial but unfortunately rare conjunction of sharp critique with warm collegiality.

For my part, my only disappointment was that as local organizer, I was not able to attend many of the presentations. Happily, I was able to attend all of the keynotes, each of which I found enlightening and first-rate. Two, in particular, however, I wish to lift up here.

To begin with, Terry Bynum, a self-described “grandfather” of IACAP, on the occasion of his receiving this year's (Preston) Covey Lifetime Achievement award, began with a personal history of the developments leading to the first CAP conferences. Though I have been privileged to attend CAP conferences for over two decades, Terry's account provided a wealth of additional details and insights that I found both intriguing and salutary. On the one hand, Terry pointed out several of the obstacles and challenges to the fledgling efforts, starting in the 1970s, to find publication outlets and support from professional organizations for CAP work that, at the time, enjoyed only tenuous footholds at the margins of both philosophy and computation. Overcoming these difficulties – including those facing CAP as a regular conference series through the 1990s - required a remarkable perseverance (if not simple stubbornness) on the part of our founding colleagues. The upshot, as our 25th anniversary conference demarcates, is a professional organization whose work enjoys international recognition –

and a healthy financial footing as well (see Treasurer's Report, this issue). Terry's talk served, for me at least, as a useful reminder of how close we came at times to not surviving, much less thriving, either individually or collectively in our work and play.

At the same time, Terry's talk reminded me of how much of our surviving and thriving as CAP and then IACAP emerged in the many informal dinners at the end of a conference day hosted by Preston Covey in his backyard. Those of us who were privileged to know Preston know what a remarkable colleague, friend, mentor, as well as most spirited advocate he was. Terry's talk served as a wonderfully fitting memorial and tribute to Preston's life, energy, and work.

Secondly, Cameron Buckner provided our closing keynote on the occasion of his receiving the Brian Michael Goldberg Memorial Award (for Outstanding Graduate Research in Computing and Philosophy, sponsored by Carnegie Mellon University). In keeping with the quality of the previous keynotes, Cameron's presentation seemed to me to sterling in its own right. Even better, as representing what Tony Beavers and I now think of as the fourth generation of IACAP scholars and researchers, Cameron's talk further conveyed to me clear assurance that our work continues to grow in both range and quality.

Between these two keynotes – a 'between' filled in with comparable substance by our other keynoters and presenters – I found IACAP'11 to in fact succeed as both a fitting commemoration and celebration of our past and as a springboard into a bright future of further research, reflection, and discovery. Simply put, IACAP'11 went well beyond my best hopes and expectations.

This judgment appears to be not just my own. As IACAP'11 participants began to take their leave at the close of the conference, I heard many fine compliments for the conference. These included once-in-a-lifetime superlatives that will be remembered and cherished to the end of my days. The best, most substantive compliment I can make in turn, and with great gratitude to all who made IACAP'11 such an enjoyable and productive experience, is: Preston, I'm sure, would have been very, very pleased. In my world, it just doesn't get any better than that: thanks to all!

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Special Request

The Executive Board of IACAP met at IACAP-11 and discussed concerns about how few women join the organization. The Board is therefore soliciting suggestions, especially from its women members, about how to increase the representation of women in the organization. The Board will take all suggestions under advisement and subsequently develop a plan. Please e-mail all suggestions directly to [Tony Beavers](#).

IACAP Membership

Anyone (students included) interested in IACAP-related topics, teaching activities and research areas can apply for ordinary or lifetime membership. Part-time and full-time undergraduate and graduate students can pay the student fees if they wish to do so.

All members will benefit from a 10% discount at all CAP conferences. Lifetime members will be listed on the website.

Furthermore, ordinary and lifetime members (but not members paying student fees) enjoy the following advantages:

- they have voting rights;
- they can nominate and be nominated as candidates for IACAP offices;
- they can be nominated for the Covey Award.

The current amounts of the individual fees are:

- students = \$10
- ordinary members = \$30
- lifetime membership = \$300

The preferred means of payment is via our online form (powered by Paypal – all major credit cards accepted). Please visit the [IACAP.org membership page](http://IACAP.org/membership/page) to join. Thank you!

Election 2011 Results

Dear IACAP Members and Friends,

The results of the election are in: Marcello Guarini has been confirmed as our new Executive Director, and John Sullins as our new Treasurer. Matthias Scheutz has also been confirmed as our three-year member at-large. In the two elections with more than one candidate, Cameron Buckner was selected over Paul Bello by just two votes for the one-year member at large position, and Steve McKay was selected over Derek Jones by just one vote for the two-year member at large graduate student position. Many thanks to all candidates for their willingness to serve and to the members of the association who participated in the election.

New officers officially take office on January 15th 2011.

Next year's cabinet (along with the date for the end of their term) is listed below.

Yours,
Tony Beavers

President

Anthony Beavers (2014)

Former President

Luciano Floridi (2014)

Executive Director

Marcello Guarini (2015)

Treasurer

John Sullins (2015)

Conference Coordinator

Philip Brey (2013)

Membership and Promotions Coordinator

Mariarosaria Taddeo (2014)

Technical Manager

Johnny Hartz Søraker (2013)

Newsletter Editor

Michael Byron (2013)

Sig Director for Minds and Machines

Marcello Guarini (2014)

Members at Large

Matthias Scheutz (2015)

Steve McKay (2014) - Graduate Student Position

Cameron Buckner (2013)

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AISB/IACAP World Congress 2012

Alan Turing 2012



CALL for PROPOSALS for SYMPOSIA

to occur as the main content of the AISB/IACAP World Congress 2012 in honour of Alan Turing

2-6 July 2012

University of Birmingham, Birmingham, UK

<http://events.cs.bham.ac.uk/turing12/> or via

<http://www.aisb.org.uk/convention/aisb12/>

organized by

- [Society for the Study of Artificial Intelligence and Simulation of Behaviour \(AISB\)](#)
- [International Association for Computing and Philosophy \(IACAP\)](#)

Preamble

AISB and IACAP are delighted to be joining forces to run the above Congress in 2012. The Congress serves both as the year's AISB Convention and the year's IACAP conference. The Congress has been inspired by a desire to honour Alan Turing and by the broad and deep significance of Turing's work to AI, to the philosophical ramifications of computing, and to philosophy and computing more generally. The Congress is one of the events forming the Alan Turing Year (<http://www.mathcomp.leeds.ac.uk/turing2012/>).

The intent of the Congress is to stimulate a particularly rich interchange between AI and Philosophy on any areas of mutual interest, whether directly addressing Turing's own research output or not. The Congress will consist mainly of a number of collocated Symposia on specific research areas, interspersed with Congress-wide refreshment breaks, social events and invited Plenary Talks. This format borrows from the normal AISB Convention practice and the theme-session structure used in IACAP conferences. All papers other than the invited Plenaries will be given within Symposia. This format is perfect for encouraging new dialogue and collaboration both within and between research areas.

Symposia are expected normally to last for one day or two days, but somewhat shorter or longer possibilities can be considered. They will probably each involve between ten and fifty participants but there are no particular limits. Symposia can include any type of event of academic benefit: talks, posters, panels, discussions, demonstrations, outreach sessions, etc.

Each Symposium will be organized by its own programme committee. The committee proposes the Symposium, defines the area(s) for it, works out a structure for it, issues calls for abstracts/papers etc., manages the process of selecting submitted papers for inclusion, and compiles an electronic file on which the symposium proceedings will be based (locally produced, and not precluding publication of papers elsewhere).

The Congress organizers are in charge of everything else: overall schedule, plenary talks, registration, creation of the individual symposium proceedings in print, creation of an overall electronic proceedings for the Conference, etc.

Some Research Themes

Proposals for Symposia are welcomed in all areas of AI and cognitive science (as at normal AISB Conventions) and all areas of philosophy related to computing (as at normal IACAP conferences). We have identified some research areas as being especially appropriate for the Congress. These are as follows, BUT ARE IN NO WAY EXCLUSIVE:

- the fundamental nature and limits of computation
- computational theory of mind
- the nature and possibility of AI
- testing for intelligence (natural or artificial)
- consciousness (natural or artificial)
- creativity (artistic and otherwise), aesthetics, etc.
- people's attitudes towards and relationships with intelligent machines
- ethics of AI and computing in general, and how AI may ultimately affect ethics
- the philosophical nature & ramifications (e.g., for notions of person, self, agenthood, social cognition) of both intelligent software agents in cyberspace and people's virtual identities.

Proposals for symposia touching on these themes will be especially welcome, but we will also very much welcome proposals in other areas relevant to AISB and/or IACAP. In particular, WE WELCOME SEQUELS to PREVIOUS AISB SYMPOSIA or IACAP THEME SESSIONS.

Symposium Proposal Procedure

NB:

- Proposers are welcome to submit more than one proposal, or to be involved in some other way in more than one.
- Proposers need not already be members of either Society and will not be required to become members. They will of course be encouraged to join!

The deadline for Symposium proposals is:

1 September 2011

Submissions should consist of:

1. a title
2. a description of between 300 and 1000 words of the research areas of the Symposium, the relevance of the Symposium to the Congress, and the nature of the academic events within the Symposium (talks, posters, panels, demonstrations, etc.);
3. with special mention of any aspects of the Symposium that bring together AI and Philosophy in an unusual way;
4. whether the Symposium is intended as a sequel to a symposium or theme session at a previous AISB or IACAP conference - and if so a clear indication of which symposium/session and when;
5. an indication of whether submissions will be by abstract, extended abstract or full paper;
6. your preferences about the intended length of the Symposium as a number of days (preferably one day or two, but otherwise anything from half a day to three days), together with a brief justification;
7. a description (up to 500 words) of any experience you have in organization of academic research meetings (NB: it is not a requirement that you have such experience);
8. names and workplaces of any invited speakers that you may have in mind for the symposium (NB: it is not a requirement to have invited speakers) ;
9. (NB: It is not a requirement to have invited speakers, and indeed it is unlikely that the Congress will be able to fund such speakers except in special cases. Therefore you would probably have to seek alternative sources of funding for them. However, it would be useful for the Congress chairs and proposal-selection group to know about possible invited speakers.)
10. your names and full contact details, together with, if possible, names and workplaces of the members of a preliminary, partial programme committee.

Submitting The Proposal

- Please visit <http://www.easychair.org/conferences/?conf=turing2012> in the role of an author and press the button "New Submission".
- In the part that asks for the "paper", upload parts A-H above as a single document - a plain-text (.txt) file or a PDF file.
- The title should also be copied into the Title box.
- Apart from a Title and Keywords, an Abstract is required. We are using this for special purposes, so your abstract NEED NOT summarize the proposal. Rather, please use the space (preferably no more than 50 words) to specify the following:
 - any additional keywords (e.g., you may wish to mention themes from the list above)
 - your preference as to the length of the Symposium (even though this is also in the main document).

Invited Plenary Speakers:

Four invited Plenary speakers have so far been secured, namely:

- COLIN ALLEN
Provost Professor of Cognitive Science and of History & Philosophy of Science
Department of Philosophy and Philosophy of Science
Indiana University,
Bloomington, IN, USA
<http://www.indiana.edu/~hpscdept/people/allen.shtml>
- LUCIANO FLORIDI
Research Chair in Philosophy of Information
and UNESCO Chair of Information and Computer Ethics
University of Hertfordshire, UK
& Director, Information Ethics research Group
and Fellow of St Cross College
University of Oxford, UK
<http://www.philosophyofinformation.net/Introduction.html>
- AARON SLOMAN
Honorary Professor
School of Computer Science
University of Birmingham, UK
http://www.cs.bham.ac.uk/about/people/showperson.php?person_id=11
- STEPHEN WOLFRAM
Founder and CEO
Wolfram Research, Inc.
Champaign, IL, USA
<http://www.stephenwolfram.com/>

Congress Chairs

Overall Chairs:

- [Anthony Beavers](#)
Philosophy and Cognitive Science
The University of Evansville
1800 Lincoln Avenue
Evansville, Indiana 47722 USA
+1 812-488-2682
afbeavers@gmail.com
(Tony is the President of IACAP)
- [John Barnden](#)
School of Computer Science

University of Birmingham
Birmingham, B15 2TT
+44 (0)121-414-3816
J.A.Barnden@cs.bham.ac.uk
(John is currently Vice-Chair of AISB, and was Chair from 2003 to 2010)

Local Chair:

- [Manfred Kerber](#)
School of Computer Science
University of Birmingham
Birmingham, B15 2TT
M.Kerber@cs.bham.ac.uk

Proposal Consideration Process, etc.

The proposals will be considered by the committees of both societies, with committee members who have conflicts of interest excluded from discussions as appropriate.

- The consideration may involve calling for clarification from the proposers.
- If similar or closely related proposals are made, we may suggest amalgamation of proposed symposia, or at least careful coordination between their organizers.
- We may suggest (or in the final instance require) changes to the length of symposia.

We expect to have selected the successful proposals by 15th September.

We will be requiring the proposers of the successful proposals to put out a first call for abstracts/papers by 15th October, with a view to:

- submissions being in by 1 February 2012
- inclusion decisions made by 1 March 2012
- final abstract/paper versions for inclusion in proceedings delivered by 30 March 2012

(These dates are provisional and may be adjusted.)

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Philosophy & Theory of Artificial Intelligence

PT-AI Conference, Thessaloniki, 3 & 4 October 2011

Aims and Scope

The theory and philosophy of artificial intelligence has come to a crucial point where the agenda for the forthcoming years is in the air - this conference will try to set that agenda and to gather many of the key players.



Artificial Intelligence is perhaps unique among engineering subjects in that it has raised very basic questions about the nature of computing, perception, reasoning, learning, language, action, interaction, consciousness, humankind, life etc. etc. - and at the same time it has contributed substantially to answering these questions (in fact, it is sometimes seen as a form of empirical research). There is thus a substantial tradition of work, both on AI by philosophers and of theory within AI itself.

The classical theoretical debates have centered around the issues whether AI is possible at all (often put as "Can machines think?") or whether it can solve certain problems ("Can a machine do x?"). In the meantime, technical AI systems have progressed massively and are now present in many aspects of our environment. Despite this development, there is a sense that classical AI is inherently limited, and must be replaced by (or supplanted with) other methods, especially neural networks, embodied cognitive science, statistical methods, universal algorithms, emergence, behavioral robotics, interactive systems, dynamical systems, living and evolution, insights from biology & neuroscience, hybrid neuro-computational systems, etc. etc. We are now at a stage, where we can take a fresh look at the many theoretical and philosophical problems of AI, including social and ethical issues - and at the same time shed light on philosophical problems from AI. This must be a joint effort with people from various backgrounds, but it must centrally involve AI researchers.

Workshop "PhiloWeb 2011"

The workshop [PhiloWeb 2011: The Second International Symposium on the Web and Philosophy](#) will take place under the umbrella of PT-AI 2011 on Oct. 5th. Organisation: Harry Halpin, Alexandre Monnin. (Workshop participants must register both with PT-AI 2011 and with the organisers.)

Invited Keynote Speakers

[Hubert Dreyfus](#), University of California at Berkeley

[James H. Moor](#), Dartmouth College

[Rolf Pfeifer](#), Zurich University

Invited speakers:

[Mark H. Bickard](#), Lehigh University

[Nick Bostrom](#), University of Oxford

[Brian Cantwell Smith](#), University of Toronto

[Ron Chrisley](#), University of Sussex

[Antoni Gomila](#), University of the Balears

[J. Kevin O'Regan](#), CNRS, Paris

[Matthias Scheutz](#), Tufts University, Boston

[Oron Shagrir](#), Hebrew University of Jerusalem

[Aaron Sloman](#), University of Birmingham

[Tom Ziemke](#), University of Skovde

Publication

Proceedings of the conference will be published as a book, with selected papers to be published in a special issue in a leading journal of the field.

The conference intends to set the foundations for an international association "PT-AI" that will further work in the field, organize events, etc.

We welcome experts in the field from philosophy and from AI as well as new and upcoming scholars who will shape the field in the decades to come.

Programme Committee

[Darren Abramson](#), Dalhousie University

[Varol Akman](#), Bilkent University

[Colin Allen](#), Indiana University

[Anthony Beavers](#), University of Evansville

[Mark H. Bickard](#), Lehigh University

[Mark Bishop](#), Goldsmiths, University of London

[Fabio Bonsignore](#), University Carlos III of Madrid

[Nick Bostrom](#), Oxford University

[Ron Chrisley](#), University of Sussex

[Jack Copeland](#), University of Canterbury

[Eric Dietrich](#), SUNY Binghamton

[Gordana Dodig-Crnkovic](#), Mälardalen University

[Hamid R. Ekbia](#), Indiana University

[James Fetzer](#), University of Minnesota

[Stefano Franchi](#), Texas A&M University

[Stan Franklin](#), University of Memphis

[Antoni Gomila](#), University of the Balears

[David Kirsh](#), University of California at San Diego

[Klaus Mainzer](#), Technical University Munich

[Jim Moor](#), Dartmouth College

[J. Kevin O'Regan](#), CNRS, Paris

[Costas Pagondiotis](#), University of Patras

[Viola Schiaffonati](#), Politecnico di Milano
[Colin Schmidt](#), Le Mans University-ParisTech
[Susan Schneider](#), University of Pennsylvania
[Oron Shagrir](#), Hebrew University of Jerusalem
[Aaron Sloman](#), University of Birmingham
[Brian Cantwell Smith](#), University of Toronto
[Steve Torrance](#), University of Sussex
[Jordi Vallverdú](#), Autonomous University of Barcelona

Organisation

[Vincent C. Müller](#), Anatolia College/ACT

--- This conference is dedicated to the memory of John Haugeland who remains an inspiration to us all ---

We are grateful for sponsoring from:

EUCog network



Programme on the Impacts of Future Technology, University of Oxford:



PT-AI is academically sponsored by:

Association for the Advancement of Artificial Intelligence (AAAI):



International Association of Philosophy and Computing (IA-CAP):



Association for Computing Machinery, Special Interest Group 'Artificial Intelligence' (ACM-SIGART):



&



European Coordinating Committee for Artificial Intelligence (ECCAI):



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Members' News & Publications (in order received):

Gordana Dodig-Crnkovic and Mark Burgin, [INFORMATION AND COMPUTATION](#) (book) World Scientific Publishing Co. Series in Information Studies 2011.

Gordana Dodig-Crnkovic and Vincent Müller, [A Dialogue Concerning Two World Systems: Info-Computational vs. Mechanistic](#). Book chapter in: INFORMATION AND COMPUTATION, World Scientific Publishing Co. Series in Information Studies. Editors: G Dodig-Crnkovic and M Burgin, 2011. <http://arxiv.org/abs/0910.5001> 2009

Gordana Dodig-Crnkovic, [Significance of Models of Computation from Turing Model to Natural Computation](#). [Minds and Machines](#), (R. Turner and A. Eden guest eds.) Volume 21, Issue 2 (2011), Page 301. <http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s11023-011-9235-1>

Gordana Dodig-Crnkovic and Wolfgang Hofkirchner, [Floridi's Open Problems in Philosophy of Information, Ten Years After](#). <http://www.mdpi.com/2078-2489/2/2/327/>
http://www.mdpi.com/journal/information/special_issues/whatisinfo 2011

Maley, C. J. (2011). Analog and digital, continuous and discrete. *Philosophical Studies*, 155(1), 117–131. doi:10.1007/s11098-010-9562-8.

Gobbo, Federico (2010). The Translation Game. *International Journal of Mind, Brain & Cognition*. 1(1) jan-jun. 45–55.

Oppenheimer, Paul E., and Edward N. Zalta, "A Computationally-Discovered Simplification of the Ontological Argument", coauthor: Paul E. Oppenheimer, *Australasian Journal of Philosophy*, 89/2 (June 2011): 333-349. Preprint available online: <http://mally.stanford.edu/Papers/ontological-computational.pdf>
Project webpage: <http://mally.stanford.edu/cm/>

From Hector Zenil:

I think this paper would be of interest for the newsletter readers:
<http://philsci-archive.pitt.edu/8712/>

I should probably also mention my essay that got a 3rd. place prize in this year's prestigious FQXi contest on Is Reality Digital or Analog? under the title "The world is either algorithmic or mostly random" (announced at the 2011 World Science Festival in New York City):
<http://fqxi.org/community/forum/topic/867>

And you can take advantage and announce the whole list of winners and interesting essays on the topic:
<http://fqxi.org/community/essay/winners/2011.1>

There was also an Interdisciplinary Workshop with Javier Blanco: Ontological, Epistemological and Methodological Aspects of Computer Science in the University of Stuttgart with an interesting program (program attached):

http://groups.google.com/group/fa.philos-l/browse_thread/thread/74bc3ecd1a17ca83

People may also find interesting my recent paper (joint work with Fernando Soler-Toscano and Joost Joosten):

Empirical Encounters With Computational Irreducibility and Unpredictability

<http://arxiv.org/abs/1104.3421>

And the first real-world application of Bennett's concept of logical depth:

<http://arxiv.org/abs/1006.0051>

forthcoming in the journal of Complexity (Wiley's)

Luciano Floridi (<http://philosophyofinformation.net>) published *The Philosophy of Information* (Oxford University Press, 2011), *Information – A Very Short Introduction* (Oxford University Press, 2010), and the *Handbook of Information and Computer Ethics* (Cambridge University Press, 2010). In 2010, he was appointed editor in chief of *Philosophy & Technology*, Springer's new journal. In 2011, he was elected fellow of the Center for Information Policy Research, University of Wisconsin–Milwaukee and received a *laurea honoris causa* from the University of Suceava, Romania. He was recently awarded a new AHRC grant for his project on information quality, to be developed in collaboration with Google.

Vallverdú, Jordi, (2010) *Thinking Machines and the Philosophy of Computer Science: Concepts and Principles*, Editor & author, USA: IGI Global Group.

Casacuberta, David; Ayala, Saray & Vallverdú, Jordi (2010), “Embodying cognition: a morphological perspective”, in Jordi Vallverdú (Ed.) *Thinking Machines and the Philosophy of Computer Science: Concepts and Principles*, (Editor i autor), USA: IGI Global Group, 344-366.

Vallverdú, Jordi (2010) "Seeing for Knowing. The Thomas Effect and Computational Science", in Jordi Vallverdú (Ed.) *Thinking Machines and the Philosophy of Computer Science: Concepts and Principles*, (Editor i autor), USA: IGI Global Group, pp. 280-293.

Vallverdú, Jordi, Shah, Huma & Casacuberta, David (2010) “Chatterbox Challenge as a Testbed for Synthetic Emotions”, *International Journal of Synthetic Emotions*, 1(2): 57-86.

Huma Shah and Kevin Warwick's jointly written Minds and Machines paper, 'Hidden Interlocutor Misidentification in Practical Turing Tests' (Vol. 20. no.3, 2010) continues as one of the most downloaded papers from the journal - 56 downloads in the past 30 days, and 171 downloads in the past 90 days to July 15, 2011: <http://www.springer.com/computer/ai/journal/11023>

Huma Shah gave a keynote at the 2nd TCIT - 2011 AISB at the University of York in April on 'Turing's Misunderstood Imitation Game and IBM Watson's Success'.

Patrick Lin: news and publications here – <http://ethics.calpoly.edu/news.html>

Stefan Artmann. Well-Being in Physical Information Spacetime. Philosophical Observations on the Use of Pervasive Computing for Supporting Good Life, in: Björn Gottfried and Hamid K. Aghajan (eds.), Behavior Monitoring and Interpretation ? BMI. Well-Being, Amsterdam 2011 (Ambient Intelligence and Smart Environments Vol. 9), pp. 26-61.

<http://www.booksonline.iospress.nl/Content/View.aspx?piid=19568>

Coeckelbergh, M. 'From killer machines to doctrines and swarms, or Why ethics of military robotics is not (necessarily) about robots.' in: *Philosophy & Technology* (first on-line 5 April 2011)

Coeckelbergh, M. 'Artificial Companions: Empathy and Vulnerability Mirroring in Human-Robot Relations' in: [Studies in Ethics, Law, and Technology](#) 4(3), December 2010

Coeckelbergh, M. 'Humans, Animals, and Robots: A Phenomenological Approach to Human-Robot Relations' in: [International Journal of Social Robotics](#) 3(2), March 2011, 197-204

Coeckelbergh, M. 'You, Robot: On the Linguistic Construction of Artificial Others' in: [AI & Society](#) 26(1), January 2011, 61-69

Coeckelbergh, M. 'Human Development or Human Enhancement? A Methodological Reflection on Capabilities and the Evaluation of Information Technologies' in: [Ethics and Information Technology](#) 13(2), May 2011, 81-92

Coeckelbergh, M. 'Robot Rights? Towards a Social-Relational Justification of Moral Consideration' in: [Ethics and Information Technology](#) 12(3), September 2010, 209-221

Coeckelbergh, M. 'Moral Appearances: Emotions, Robots, and Human Morality' in: [Ethics and Information Technology](#) 12(3), September 2010, 235-241

Abbott, Russ (2010) "[Abstract data types and constructive emergence](#)" [Newsletter on Philosophy and Computers](#) of the American Philosophical Society, v9-n2, Spring 2010, pp 48-56.

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