



SILFS 2017

Triennial International Conference of the Italian Society for Logic and
the Philosophy of Science
Bologna, Bologna University
June 20-23, 2017

June 20th, Tuesday

9.00	Hall					Registration
10.30	Room A					Opening Addresses
	Paolo Leonardi <i>University of Bologna</i>		Antonino Rotolo <i>Pro-Rector of the University of Bologna</i>			
						Giovanna Corsi <i>President of SILFS</i>
11.00	Room A <i>chair: Maria Carla Galavotti</i>		PLENARY LECTURE Dag Westerståhl <i>Logical constants from consequence relations: Carnap's question</i>			
12.00						PLENARY LECTURE Eleanor Knox <i>Spacetime functionalism</i>
13.00	Lunch break					
Tue., 20	Room A <i>chair: F. Bianchini</i>	Room B <i>chair: P. Minari</i>	Room C <i>chair: M. Rossberg</i>	Room D <i>chair: F. Laudisa</i>	Room Wolf <i>chair: R. Campaner</i>	
14.30	M. Alai An improved essentiality requirement for deployment realism	B. Kooi, A. Tamminga Two-sided sequent calculi for four-valued logics		D. Romano The multi-field interpretation of the wave function in Bohm's theory	D. Serpico, F. Fabris Quantitative and qualitative genetics. Issues in contemporary models	
15.00	A. Giordani, I. Canavotto A four-level account of scientific representation	S. Bonzio, M. Pra Baldi Undefinability of standard sequent calculi for para- consistent logics		M. Hubert Quantum particles don't have properties	D. Vecchi DNA: specific difference maker but not developmental determinant	

June 20th, Tuesday

Tue., 20	Room A <i>chair: F. Bianchini</i>	Room B <i>chair: P. Minari</i>	Room C <i>chair: M. Rossberg</i>	Room D <i>chair: F. Laudisa</i>	Room Wolf <i>chair: R. Campaner</i>
15.30	L. Tambolo Contingency, counterfactual history, underdetermination	M. Girlando, S. Negri, N. Olivetti From labelled to internal sequent calculi for Lewis' conditional logic V	A. Sereni Neo-logicism with(out) grounding?	C. Conroy Everettian actualism	G. Airoidi, V. Luque, C. Saborido What is the place of genetic drift in the Price equation?
16.00	D. Portides Idealization and abstraction in scientific modeling	E. Pavlovic Modal extension of LK-Quarc	L. Zanetti Bad company: The less I know the better (?)	A. Solé The metaphysics of Bohmian dispositions	M. Luchetti Theory-relative constitutive principles and evolutionary biology: Relaxing a conceptual tool
16.30	Coffee break				
Tue., 20	Room A <i>chair: E. Castellani</i>	Room B <i>chair: G. Corsi</i>	Room C <i>chair: G. Oliveri</i>	Room D <i>chair: V. Fano</i>	Room Wolf <i>chair: R. Campaner</i>
17.00	L. Fahrbach Confirming theories without considering rival theories	R. Thakral Neighbourhood semantics for deontic necessity	F. Loregian Sober ontic structural realism	L. Felling A top-down account of explanation in Quantum Information Theory	C. Amoretti, E. Lalumera The DSM-5 definition of mental disorder: Some points on the harm requirement
17.30	M. Zach Conceptual analysis in philosophy of science	F.L.G. Faroldi, T. Protopopescu Logics of hyperintensional practical reasons	E.N. Giovannini Hilbert and the foundations of theory of plane area	G. Miotti Econophysics as a theory of financial markets: An instance of reductionism in the social sciences	N. Dolcini, V. Valle Vacuous perceptions: Bridging possible and actual hallucinations
18.00	A. Gebharder Causal exclusion and causal Bayes nets	F.L.G. Faroldi Identity and Indiscernibility in higher-order logic and metaphysics	E. Chua The price ain't right: high costs for determinacy in Hale's semantics and arithmetic structuralism	M. Cuffaro Information causality, the Tsirelson bound, and the 'Being-Thus' of things	

June 21st, Wednesday

Wed., 21	Room A <i>chair: A. Ledda</i>	Room B <i>chair: G. Gherardi</i>	Room C <i>chair: F. Bianchini</i>	Room D <i>chair: G. Tamburrini</i>	Sala Rossa <i>chair: M. Bertolaso</i>
9.30	T. Ferrando What is real in levels of reality	S. Bonzio, J. Gil-Férez, F. Paoli, L. Peruzzi Paraconsistent weak Kleene logic: An abstract algebraic approach	A. Kassapidis The symmetry underneath the ontological argument	E. Datteri Model-oriented and data-oriented simulations for the study of brain mechanisms	A.M. Dieli The problem of the hierarchy of biological individuals
10.00	F. Romero, J. Sprenger Scientific self-correction: The Bayesian way	D. Mezzadri Formality of logic and Frege's <i>Begriffsschrift</i>	P. Petricca Interoperability and knowledge modelling: Epistemological issues in DLs and ontological semantics	S. Pinna Extended computational systems	B. Kocaoglu Towards a process ontological account of causal transitions in hierarchic systems
10.30	Coffee break				
11.00	R. Zambiasi The Copernican creative shift and the Keplerian revolution	B. Dicher Pluralism about logical consequence: The internal/external case	T. Numerico Wittgenstein's influence on Turing's test	M. Tagliaferri Nomological mapping account: A comparison.	C. Amoretti, M. Frixione, A. Lieto The concept of disease: Some limits of the non-classical views
11.30	F. Malfatti Interpreting quantum mechanics: A tentative modal account	J. Dittrich Revising inferences	M. Giunti How to FOOL the expressive power of RDF	A. Plebe Theoretical roots of the computational and representational paradigms in cognitive neuroscience	F. Pellet Disease as essence annihilation
12.00	Room A <i>chair: Giovanna Corsi</i>	PLENARY LECTURE Giovanna D'Agostino <i>The modal μ-calculus: How games, fixed points, and automata met each other</i>			
13.00	Lunch break				
Wed., 21	Room A <i>chair: V. Fano</i>	Room B <i>chair: A. Naibo</i>	Room C <i>chair: G. Sergioli</i>	Room D <i>chair: M. Giunti</i>	Sala Rossa <i>chair: F. Boem</i>
14.30		SYMPOSIUM Proof theoretic semantics and the justification of logical laws S. Negri	J. Korbmacher, G. Schiemer Logical concepts and structural properties	S. Arfini The epistemic conditions for collaborative interdisciplinarity	S. Häggqvist Natural kinds: From twilight to night?

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Wed., 21	Room A <i>chair: V. Fano</i>	Room B <i>chair: A. Naibo</i>	Room C <i>chair: G. Sergioli</i>	Room D <i>chair: M. Giunti</i>	Sala Rossa <i>chair: F. Boem</i>
15.00	K. Bschr, L. Braunack-Mayer Predicting under structural uncertainty: Why not all Hawkmoths are ugly	SYMPOSIUM Proof theoretic semantics and the justification of logical laws P. Maffezoli	D. Molinini Mathematical generosity and ontological parsimony	J. B. Pitts Conservation laws and Sean Carroll's critique of mind-body dualism	R. Poellinger Towards robust causal claims in pharmacological risk assessment
15.30	G. Cevolani Probability, truthlikeness, and two paradoxes of rational belief	SYMPOSIUM Proof theoretic semantics and the justification of logical laws N. Gratzl	M. Ginammi Applicability problems generalized	M. Firlej, A. Izdebski Popper's third world as Frege's kingdom of objective thoughts	B. Osimani The variety of evidence thesis and the reproducibility problem: Statistics meets formal epistemology
16.00	A. Oldofredi Problems with statistics: How do we choose the relevant population in our studies?	SYMPOSIUM Proof theoretic semantics and the justification of logical laws M. Rossberg	C.J. Feldbacher-Escamilla Lockean thesis and non-probabilism	N. Moro Sensation in H. von Helmholtz's physiology between mechanics and the a priori	V. Tripodi Epistemic injustice and medical diagnosis
16.30	Coffee break				
	Room A <i>chair: A. Afriat</i>	Room B <i>chair: A. Naibo</i>	Room C <i>chair: M. D'Agostino</i>	Room D <i>chair: M. Morganti</i>	Sala Rossa <i>chair: F. Boem</i>
17.00	D. Rizza A new numerical treatment of Bertrand's paradox	SYMPOSIUM Proof theoretic semantics and the justification of logical laws L. Tranchini	J.M. Durán On the novelty of computer simulations for the philosophy of science	C. Del Sordo Basic structures for an ontology of neutral monism	S. Canali Methodological novelties and causal inference in epidemiology
17.30	S.C. Fletcher Stopping rules as experimental design	SYMPOSIUM Proof theoretic semantics and the justification of logical laws P. Pistone	P. Papayannopoulos Real number algorithms and open texture	V. Livanios Dispositional and symmetry structures	M. Backmann Induction and necessary connections in scientific practice
18.00	R. Gronda Dewey's structural realism: a viable option?	SYMPOSIUM Proof theoretic semantics and the justification of logical laws H. Oliveira	M.-S. Hantke The theory of paraconsistent quasi-structures: A new structural approach	G. Hofer-Szabó, P. Fazekas, G. Balázs, G. Kertész A dynamical systems approach to causation	A. Drago The emerging of biology's foundations from the two major accounts of its history

June 22th, Thursday

Thu., 22	Room A <i>chair: G.Corsi</i>	Room B <i>chair: F. Paoli</i>	Room C <i>chair: I. Binini</i>	Room D <i>chair: C.Conroy</i>	Sala Rossa <i>chair: F. Sterpetti</i>
9.30	N. Retzlaff, A. Gebharter A new proposal how to handle counterexamples to Markov causation à la Cartwright, or: Fixing the chemical factory	L. Bellotti Novikov's cut elimination	F. Marcacci The invention of the counterfactualty in the Stone Age of the scientific demonstration	E. Ippoliti Undecidability of the spectral gap. Philosophical issues and some ways around them	A. Frigerio On the ontology of biological species
10.00	F. Bacchini Direct realism and the problem of perceiving into the past	M. Rossberg The extension of second-order logical consequence and a proof-theoretic redundancy theory of truth	M. Shenefelt, H. White Why does formal deductive logic start with the classical Greeks?	V. Fano G. Macchia A dappled scientific image of time	K. Baraghith The Problem of speciation in the cultural evolution of signaling systems
10.30	Coffee break				
11.00	R. Fumagalli Who is afraid of scientific imperialism?	P. Pistone On polymorphism and quantifiers in linear logic	S. Hizir Aristotle and Avicenna on the predication of 'existent'	A. Afriat Logic of gauge	F. Boem Molecular Biology vs. Bioinformatics: The method and the demarcation
11.30	S. Badiei Revisiting the liberal critiques of scientism in the social studies during the first half of the 20th century	M. Acclavio Proof diagrams: Another parallel syntax for proof-theory	J. Brumberg-Chaumont Logical hylomorphism in the 13 th century	V. Chasova Gauge symmetries and symmetries with direct empirical status	N. Bertoldi Explaining eusociality: Multilevel selection, kin selection and the structure of evolutionary theory
12.00	Room A <i>chair: Giovanni Boniolo</i>	PLENARY LECTURE Sabina Leonelli <i>What distinguishes data from models?</i>			
13.00	Lunch break				
	Room A <i>chair: M. Alai</i>	Room B <i>chair: A Cantini</i>	Room C <i>chair: R. Pinzani</i>	Room D <i>chair: L. Magnani</i>	Sala Rossa <i>chair: G. Boniolo</i>
14.00	S. Bordoni The emergence of philosophy of science in France: Cournot 1861-1875	F. Corpina Determinism or indeterminism: What is minimal in tense logics?	SYMPOSIUM Goat-stags, chimeras and other fantastic creatures C. Tarlazzi	G. Ferretti Is there a <i>pictorial</i> motor world? The case of <i>pictorial</i> action properties	SYMPOSIUM On the concept of organism M. Bertolaso

June 22th, Thursday

Thu., 22	Room A <i>chair: M. Alai</i>	Room B <i>chair: A Cantini</i>	Room C <i>chair: R. Pinzani</i>	Room D <i>chair: L. Magnani</i>	Sala Rossa <i>chair: G. Boniolo</i>
14.30	A. Raftopoulos Bacon's New Atlantis, the Newtonian scientific method, and the Cartesian analysis	A. Mura A Kripke-style modal semantics for a refined version of De Finetti's theory of tri-events	SYMPOSIUM Goat-stags, chimeras and other fantastic creatures W. Wciórka	V. Petrolini, M. Viola From Affect Circumplex to Affect Pendulum? Insights from psychopathology on the relation between arousal and valence	SYMPOSIUM On the concept of organism C. Wolfe
15.00	A. Cordero Selective realism in history	I. Chajda, J. Paseka Transition operators assigned to physical systems	SYMPOSIUM Goat-stags, chimeras and other fantastic creatures I. Binini	J.D. Greenwood Social cognition, social neuroscience and evolutionary social psychology: What's missing?	SYMPOSIUM On the concept of organism L.Bich, J-F.Moreau, T.Pradeu
15.30	M. Badino Realism, continuity, and the historiography of science	G. Battilotti, R. Lauro Grotto An approach to Bi-logic by modalities	SYMPOSIUM Goat-stags, chimeras and other fantastic creatures J. Brumberg-Chaumont	G. Piredda Transparency, belief formation and consciousness: A deadlock for the extended mind?	SYMPOSIUM On the concept of organism E.Casetta, J. Marques da Silva
16.00			SYMPOSIUM Goat-stags, chimeras and other fantastic creatures G. Ciola		SYMPOSIUM On the concept of organism F. Sterpetti

17.30 **Circolo Ufficiali**
Via Marsala 12

Welcome drinks

17.45

General assembly of SILFS

19.30

Conference dinner

June 23rd, Friday

Fri., 23	Room A <i>chair: V. Crupi</i>	Room B <i>chair: E. Orlandelli</i>	Room C <i>chair: C. Casadio</i>	Room D <i>chair: R. Lupacchini</i>
9.00	K. Salimkhani Explaining unification in physics internally	SYMPOSIUM Logical pluralism C. De Florio, V. Morato	M. I. Corbalán Resumptive pronouns in a type logical grammar	D. Lazarovici Relativity, nonlocality and the consequences
9.30	A. Vassallo Grounding as metaphysical causation in spacetime physics	SYMPOSIUM Logical pluralism A. Sereni M.P. Sforza Fogliani	C. Ternullo Epistemic advantages of multiversism	SYMPOSIUM Relations in physics and metaphysics M. Dorato
10.00	F. Martini Patterns of complex chains of hearsay: An epistemological framework	SYMPOSIUM Logical pluralism F. Ferrari S. Moruzzi	M. Bianchin Social cognition and hypothetical contracts	SYMPOSIUM Relations in physics and metaphysics V. Lam
10.30	Coffee break			
Fri., 23	<i>chair: V. Crupi</i>	<i>chair: E. Orlandelli</i>	<i>chair: C. Casadio</i>	<i>chair: C. Conroy</i>
11.00	P. Barrotta, E. Montuschi The dam project. Who are the experts? Philosophical lessons from the Vajont disaster	SYMPOSIUM Logical pluralism M. Carrara R. Ciuni	T. Bertolotti Understanding superstition as extended cognition and individual niche construction	SYMPOSIUM Relations in physics and metaphysics D. Glick
11.30	G. Pozzoni Scientific realism and the philosophy of causation	SYMPOSIUM Logical pluralism A. Giordani I. Canavotto		SYMPOSIUM Relations in physics and metaphysics F. Laudisa
12.00	R. Poli Anticipatory systems. A first introduction	SYMPOSIUM Logical pluralism C. Nicolai		SYMPOSIUM Relations in physics and metaphysics F.A. Muller
12.30	N.D. Oseroff The return of a demarcation problem	SYMPOSIUM Logical pluralism L. Picollo T. Schindler		<i>Discussion</i>
13.00	Lunch break			
14.30	Room A <i>chair: Roberto Giuntini</i>	PLENARY LECTURE Jan von Plato <i>From misreading to myth: False, unsustainable, or otherwise dubious beliefs about the development of logic and foundations</i>		
15.30		PLENARY LECTURE Francesco Guala <i>Two bad arguments against naturalism in the philosophy of social science</i>		
16.30	CLOSING			

Affiliated Symposia

SYMPOSIUM **Proof-theoretic semantics and the justification of logical laws**

Wed. 21 Room B

- 14.30 **S.Negri** Proof-theoretic semantics for conditionals and non-normal modalities
- 15.00 **P. Maffezioli** Mereological pluralism
- 15.30 **N. Gratzl** In defense of classical logic
- 16.00 **M. Rossberg** General elimination harmony
- 17.00 **L.Tranchini** Harmony, stability and identity: Some lessons from Martin-Löf's type theory
- 17.30 **P. Pistone** On propositional variables: The atomic and the parametric view
- 18.00 **H. Oliveira** Harmony, stability and relevant logic

SYMPOSIUM **Goat-stags, chimeras and other fantastic creatures**

Thu. 22 Room C

- 14.00 **C. Tarlazzi** Are universal terms fictitious terms?
- 14.30 **W. Wciórka** Peter Abelard on the existential import of modal sentences *de non esse*
- 15.00 **I. Binini** "My future son is possible alive". Existential presupposition and empty names in Abelard's modal logic
- 15.30 **J. Brumberg-Chaumont** Existential import in 13th century *sophisma* "Every man is by necessity an animal, there being no men"
- 16.00 **G. Ciola** Instants, chimeras, ass-men, and other imaginable things: Marsilius of Inghen on *imaginabilia*

SYMPOSIUM **On the concept of organism**

TRhu. 22 Sala Rossa

- 14.00 **M. Bertolaso** The organism inside cancer and cancer research
- 14.30 **C. Wolfe** The organism without idealism: hybridity, boundaries, go-between
- 15.00 **L. Bich, J.-F. Moreau, T. Pradeu** Understanding multicellular organisms
- 15.30 **E. Casetta, J. Marques da Silva** Multispecies biofilms: Organisms, (evolutionary) individuals, or what? A case study from bacteria
- 16.00 **F. Sterpetti** Organisms, natural selection, and mathematical explanations

SYMPOSIUM **Logical pluralism**

Fri. 23 Room B

- 9.00 **C. De Florio, V. Morato** Adopting pluralism?
- 9.30 **A. Sereni, M.P. Sforza Fogliani** Who watches the watchmen? Some metatheoretical challenges for logical pluralism
- 10.00 **F. Ferrari and S. Moruzzi** Logical pluralism, indeterminacy, and the normativity of logic
- 11.00 **M. Carrara, R. Ciuni** Classical recapture in many-valued logic
- 11.30 **A.Giordani, I. Canavotto** Negation as conceptual exclusion
- 12.00 **C. Nicolai** Abductivism and the standard for logical revision
- 12.30 **L. Picollo, T. Schindler** Deflationism and conservativity

SYMPOSIUM **Relations in physics and metaphysics**

Fri. 23 Room D

- 9.30 **M. Dorato** Bohr's contextualism, Rovelli's relationalism and quantum spacetime
- 10.00 **V. Lam** Global and relational aspects of black holes
- 11.00 **D. Glick** Swapping something real: Entanglement swapping and entanglement realism
- 11.30 **F. Laudisa** Is there a metaphysical framework for relational quantum mechanics?
- 12.00 **F.A. Muller** Parts of the whole story
- 12.30 Discussion

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