DIAGRAMS24 PROGRAM: OVERVIEW
VERSION SEPTEMBER 26, 2024

Start	End	Day 1: Friday, September 27, 2024		
08:30	09:00	Registration, *Entrance*		
09:00	10:30	Tutorial 1, *room S1* Robert Harlander, Sven Yannick Klein and Magnus Schaaf: *FeynGame - Feynman diagrams made easy*	~~Tutorial 2, *room S2*~~	
10:30	11:00	Refreshment Break: *Entrance*		
11:00	12:30	Tutorial 3, *room S1* Celeste Pedro and Terhi Marttila: *Digital Volvelles*	Tutorial 4, *room S2* Viktor Blasjo: *Euclid's Elements: The board game*	Lecture on the Diagrammatic Turn in Quantum Physics, *Senatssaal* • Razin A. Shaikh: *The Focked-up ZX Calculus: Picturing Continuous-Variable Quantum Computation*
12:30	14:00	Lunch: *Entrance*		
14:00	15:30	Tutorial 4, *room S1* Peter Cheng, Grecia Garcia Garcia, Fiorenzo Colarusso, Mateja Jamnik and Daniel Raggi: *Cognitive Modelling of Interpretations of Diagrams and Notations*	Tutorial 5, *room S2* Reetu Bhattacharjee: *Forgotten diagrams and their applications in gestures*	
15:30	16:00	Refreshment Break*: Entrance*		
16:00	17:30	Tutorial 7, *room S1* J.R. Osborn: *Diagrammatica: A Community-Driven Database for Collecting, Tagging, and Exhibiting Diagrams*	Tutorial 8, *room S2* Jens Lemanski: *Diagrams in the Age of Kant*	

Day 2: Saturday, September 28, 2024				
09:00	9:30	Registration, *Entrance*		
09:15	9:30	Welcoming Remarks, *Aula*		
9:30	10:30	Keynote 1, *Aula* Catarina Dutilh Novaes: A dialogical account of diagrams in mathematical proofs		
10:30	11:00	Refreshment Break *Entrance*		
11:00	12:30	Paper Session 1, *room S1* Chair: Uta Priss • Alessio Moretti: *The Geometry of 4-valued Contradiction: the Oppositional Quadri-Segment B.4.2*	Paper Session 2, *room S2* Chair: Erica de Vries • Johanna Schoenherr, Anselm R. Strohmaier and Stanislaw Schukajlow: *Meta-Analysis of Visualization Interventions in Mathematics Education*	Workshop: Peirce's Philosophy of Notation, *Senatssaal* • Amirouche Moktefi: *On the plurality of logical notations*

		• Lorenz Demey and Hans Smessaert: Euler Diagrams, Aristotelian Diagrams and Syllogistics • Atsushi Shimojima and Dave Barker-Plummer: *A Way Diagrams Explain: Analysis Based on Consequence Matching*	• Peter Cheng and Timon Boehm: *Why Feynman Diagrams Are Worth 10,000 formulas: A Representational Epistemic Analysis* • Johanna Schoenherr and Richard E. Mayer: *Anxiety Moderates the Effects of Drawing Support on Drawing Accuracy in Mathematical Modeling*	• Dave Beisecker: *Peirce, Hegel, and Diagrams of Pure Being and Nought* • Markus Pantsar: *Peirce's Philosophy of Notations and the Trade-offs in Numeral Symbol Systems*
12:30	14:00	Lunch *Entrance*		
14:00	15:15	Paper Session 3, *room S1* Chair: Hans Smessaert • Sohail Hossain and Mihir Kumar Chakraborty: *Sentence Negation and Term Negation as Syntactic Operations in Diagram Logic* • Can Baskent: *Playing Games with Diagrams: Truth Diagrams and Game Semantics*	Paper Session 4, *room S2* Chair: Marco Schorlemmer • Jens Lemanski and Reetu Bhattacharjee: *On the Expressivity of Byzantine Diagrams in Logic* • Janne Holmén: *A history of diagrams – Turning points in the spatial representation of ideas and information*	Workshop: Peirce's Philosophy of Notation, *Senatssaal* • Minghui Ma, Ahti-Veikko Pietarinen: *Monadic Existential Graphs and their Notational Novelties* • Jukka Nikulainen, Ahti-Veikko Pietarinen: *Ethics and Philosophy of Notation in the egpeirce LaTeX Package*
15:15	15:45	Refreshment Break *Entrance*		
15:45	17:30	Paper Session 5, *room S1* Chair: Arnold Oostra • Reetu Bhattacharjee and Mario Piazza: *Adapting Venn diagrams for Non-Monotonic Reasoning* • Uta Priss and Dominik Dürschnabel: *Rectangular Euler Diagrams and Order Theory* • Yuri Sato, Ayaka Suzuki and Koji Mineshima: *Building a large dataset of human-generated captions for science diagrams*	Paper Session 6, *room S2* Chair: Atsushi Shimojima • Yuri Engelhardt and Clive Richards: *12 questions, 19 visual encoding techniques, and 101 types of visualization – each described by a systematically generated sentence* • Mary Elworth: *Multiple representations in mathematical practice: Cluster algebras as a case study* • Guy Marshall: *Drawing Technology: Sketches of Isambard Kingdom Brunel*	Workshop: Peirce's Philosophy of Notation, *Senatssaal* • Frederik Stjernfelt: *A Note on an Invisible Notation* • Javier Legris: *Note on the interpretation of the line of identity in the Beta Graphs* • Francesco Bellucci: *Linearity Lost* • Nathan Haydon, Ahti-Veikko Pietarinen: *Ethics of Notation, Existential Graphs, and Logical Analysis*

Day 3: Sunday, September 29, 2024		
09:30	10:30	Keynote 2, *Aula* Mateja Jamnik: How can we make trustworthy AI?
10:30	11:00	Refreshment Break *Entrance*
11:00	11:45	Poster Session Talks, *Aula* Chairs: Jens Lemanski and Mikkel Willum Johansen • Tullio Aebischer: *A diagram helping the mathematical problem solving procedure* • Fernando Soler Toscano and Marcos Bautista López Aznar: *An Innovative Approach to Diagrams Representation: The Marlo Diagrams Web Page* • Noah Greenstein: *On the Formal Cause of Diagrams: Mimesis & Phenomenology* • Koiti Hasida, Zilian Zhang, Zifan Yao, Vili Valtteri Karilas, Shitao Fang, Kuanghuan Tan, Kenichi Shibata and Yusuke Matsubara: *Collaborative Graph-Document Composition Is Easy and Enhances Critical-Thinking Skills without Extra Cost* • Claudia Anger and Lorenz Demey: *The Region Connection Calculus, Euler Diagrams and Aristotelian Diagrams* • Masahiro Morii, Takashi Ideno, Yuki Tamari, Kazuhisa Takemura and Mitsuhiro Okada: *An eye-tracking study on the effects of using highlighted multi-attribute tables: A preliminary report* • Wode Ni, Sam Estep, Hwei-Shin Harriman, Jiří Minarčík and Joshua Sunshine: *Codifying Visual Representations* • Joannes B. Campell and Michael A. Müller: *Between pro/con-lists and argument graphs: Finding the right level of complexity in argumentation representation* • Henri Prade and Gilles Richard: *Diagrammatic analogical reasoning*
11:45	13:30	Poster Session, *Entrance*
12:30	13:30	DIAGRAMS assembly, All welcome, *room S1*
19:00	22:00	Conference Dinner *Schlossgarten*

Day 4: Monday, September 30, 2024				
9:00	10:30	Paper Session 1, *room S1* Chair: Dave Beisecker • Bryan Pickel and Brian Rabern: *A Compositional Semantics for Venn diagrams* • Arnold Oostra: *Implicational Existential Graphs* • Alexander De Klerck, Leander Vignero and Lorenz Demey: *Category Theory for Aristotelian Diagrams: The Debate on Singular Propositions*	Paper Session 2, *room S2* Chair: Guy Marshall • Marco Schorlemmer, Mohamad Ballout and Kai-Uwe Kühnberger: *Generating Qualitative Descriptions of Diagrams with a Transformer-based Language Model ion 2* • Maximilian Kasperowski, Niklas Rentz, Sören Domrös and Reinhard von Hanxleden: *KIELER: A Text-First Framework for Automatic Diagramming of Complex Systems* • Sören Domrös and Reinhard von Hanxleden: *Diagram Control and Model Order for Sugiyama Layouts*	Workshop Diagrams and Mathematical Practice, *Senatssaal* • *Presentation of the workshop by the organizers* • Nathan Haydon and Ahti-Veikko Pietarinen: *Diagrammatic Syntax and Neo-Peircean Calculus of Relations in the Diagram-matization of Mathematical Practices* • Alessio Moretti: *The Coloured Geometry of 5-Valued Contradiction: the Oppositional Quinque-*

				Segment B52 and its 4D Attractor
10:30	11:00	Refreshment Break *Entrance*		
11:00	12:30	Paper Session 3, *room S1* Chair: Lorenz Demey • Stef Frijters and Atahan Erbas: *Aristotelian Diagrams as Logic Diagrams* • Risako Ando, Kentaro Ozeki, Takanobu Morishita, Hirohiko Abe, Koji Mineshima and Mitsuhiro Okada: *Can Euler Diagrams Improve Syllogistic Reasoning in Large Language Models?* • Francesco Bellucci: *Reference by Occurrence*	Paper Session 4, *room S2* Chair: Emmanuel Manalo • Gudula Volbers, Janina Krawitz, Stanislaw Schukajlow and Gilbert Greefrath: *Negative Impact of Drawing on Problem Solving: An Eye-Tracking Study on Non-linear Geometry Problems* • Erica de Vries, Neil Schwartz and Martin Galilee: *Learning magnitude of energy consumption with symbolic or iconic representations* • Giulia Miotti: *Diagrams and their role in economics as problem-solving devices and knowledge-improving tools. The case of the Phillip Machine*	Workshop Diagrams and Mathematical Practice, *Senatssaal* • Mikkel Willum Johansen: *Empirical studies of mathematical diagrams: Lessons from five years of investigations* • Mario Román Garcia and Ahti-Veikko Pietarinen: *Linear Mathematics and the Rule of Duplication in Graphical Logic* • Caroline Pires Ting and Jean-Yves Beziau: *Linear Proof versus Diagram-matic Proof - Study of an Example: There is no Cube of Opposition*
12:30	14:00	Lunch *Entrance*		
14:00	15:30	Paper Session 5, *room S1* Chair: Mitsuhiro Okada • Xinyuan Yan, Peter Rodgers, Peter Rottmann, Daniel Archambault, Jan-Henrik Haunert and Bei Wang: *EulerMerge: Simplifying Euler Diagrams Through Set Merges* • Peter Rodgers, Peter Chapman, Andrew Blake, Martin Nöllenburg, Markus Wallinger and Alexander Dobler: *Hoop Diagrams: A Set Visualization Method* • Amirouche Moktefi, Reetu Bhattacharjee and Jens Lemanski: *Representing uncertainty with expanded Ueberweg diagrams*	Paper Session 6, *room S2* Chair: Piotr Kozak • Stefan Helmke, Kerem Doğan, Robert Scheffler and Gregor Wrobel Domain-Specific Rules Override Aesthetic Graph Drawing Criteria: *An Exploration of User-Generated Diagrams* • Ran Lu and Emmanuel Manalo: *Chinese Children' Drawing in Science Class* • Dave Beisecker: *The Topology of Assertion: A Diagrammatic Rationale for Our Enduring Love of Truth*	Workshop Diagrams and Mathematical Practice, *Senatssaal* • Jasmin Özel: *A Diagrammatical Perspective on the Algebras of Logic* • Andrei Rodin and George Shabat: *Achieving Mathematical Understanding via Natural Language, Symbols and Diagrams* • General Discussion

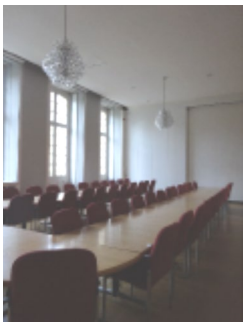
15:30	16:00	Refreshment Break *Entrance*		
16:00	18:00	Paper Session 7, *room S1* Chair: Yuri Sato • Binfeng Chen, Jing Zhao and Lin He: *Designing a Mind-Mapping-Assisted Comparative Literature Course in Chinese Academic Settings* • Emmanuel Manalo and Mari Fukuda: *Integration of Learning Through the Use of Self-Constructed Diagrams: Opportunities and Challenges* • Piotr Kozak: *What Does it Mean that Diagrams Represent Constructions?*	Paper Session 8, *room S2* Chair: Peter Cheng • Björn Gottfried: *Indeterminate set space diagrams* • Andrew Schumann: *Mozi's Square of Opposition and Logemes as New Logical Approach* • Christina Kittsteiner: *Schopenhauer's Sorites Diagram* • Fangzhou Xu and Ahti-Veikko Pietarinen: *Peirce's extended Euler diagrams and the system AtI based on Ladd-Franklin's exclusion relations*	

Day 5: Tuesday, October 1, 2024		
09:30	10:30	Keynote 3 *Aula* Barbara Tversky: Where Diagrams Come From
10:30	11:00	Refreshment Break *Entrance*
11:00	13:00	Graduate Symposium, *room S1* Chair: Lenoie Bosveld Presentations: Maylee Mann and Jacqueline Marks: *The Metaphysics Jellyfish: A Structural Remodel of the Metaphysics Matrix and Elaboration on Experiential Benefits* Short presentations: Mary Louise Elworth Hwei-Shin Harriman Christina Kittsteiner Ran Lu Peter Rottmann Xinyuan Yan

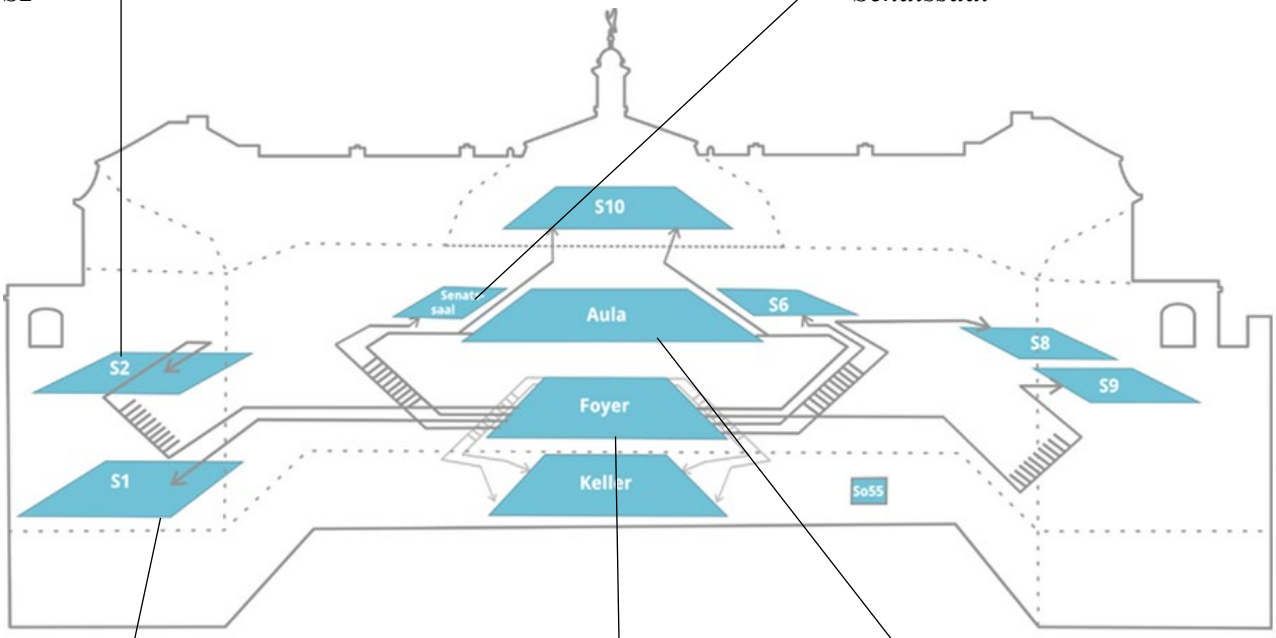
Short paper: 20min. (incl. discussion)
Long paper/Abstract: 30 min. (incl. discussion)

Location: Schloss Münster, Schlosspl. 2, 48149 Münster, Germany
https://maps.app.goo.gl/yPwEHWKGQ8b9Bo2m8

S2



Senatssaal



S1

Aula

Foyer
Entrance,
Registration, Breaks