

International Conference:

Grothendieck's Mathematical and Philosophical Legacy

Chapman University, Orange (CA) — Beckman Hall, Room 106

May 24th-28th, 2022

24th Tuesday

8:45 – 9:00 Welcome by Michel IBBA, dean of the Schmid College of Science and Technology

9:00 – 10:00 Marco Panza (Chapman, CNRS) *Grothendieck's promenade, or the eulogy of aloneness: an introduction to Grothendieck's spirit by his own words*

10:00 – 11:00 Fernando Zalamea (Univ. Nacional de Colombia): *A Unitary Vision of Grothendieck's 40 Main Years (1951-1991): The Models TSK (Topos of Sheaves over Kripke Models)*

11:00 – 11:15 Coffee Break

11:15 – 12:15 Kevin Buzzard (Imperial College London; by zoom): *Grothendieck's approach to equality*

12:15 – 1:15 Jean Pierre Marquis (Univ. of Montréal): *Grothendieck, Bourbaki and mathematical structuralism*

1:15 – 2:30 Lunch

2:30 – 3:30 Colin McLarty (Case Western Reserve Univ.): *Grothendieck did not believe in universes, he believed in topos and schemes*

3:30 – 4:30 Eileen Landy (UC Davis): *As If Category Theory Were a Foundation*

4:30 – 5:30 Jean-Jacques Szczecinaiz (Univ Paris Cité): *On some points of homological algebra*

25th Wednesday

9:00 – 10:00 John Baez (UC Riverside): *Motivating Motives*

10:00 – 11:00 Simona Paoli (Univ. of Leicester; by zoom): *From higher groupoids to higher categories*

11:00 – 11:15 Coffee Break

11:15 – 12:15 Brice Halimi (Univ. Paris Cité): *Context-dependence and descent theory*

12:15 – 1:15 Goro Kato (Cal Poly): *The Descent Methods for Phenomena of Organization-Emergence*

1:15 – 2:30 Lunch

2:30 – 3:30 Jessica Carter (Aarhus Univ.): *Grothendieck's contribution to K-theory and some consequences for the ontology of mathematics*

3:30 – 4:30 Frederic Jaeck (Univ. of Aix-Marseille): *A philosophy in the shade of Grothendieck's mathematics*

4:30 – 5:30 Carmen Martinez (UNAM): *Conjectures, counterexamples and A. Grothendieck*

7:00 Gala Dinner at the Chapman President Residence

26th Thursday

9:00 – 10:00 Ahmed Sebbar (Chapman) *Euler's Products*

10:00 – 11:00 Yves Adré (Sorbonne Univ., Paris; by zoom): *Grothendieck and differential equations*

11:00 – 11:15 Coffee Break

11:15 – 12:15 Daniele Struppa (Chapman): *Superoscillatory Sequences and Infinite Order Differential Operators*

12:15 – 1:15 Mohamed Saidi (Univ. of Exeter): *The anabelian geometry of Grothendieck*

1:15 – 2:30 Lunch

2:30 – 3:30 Pino Rosolini (Univ. of Genova): *Grothendieck fibrations, or when aesthetics drives mathematics*

3:30 – 4:30 Simon Henry (Univ. of Ottawa; by zoom): *Grothendieck's homotopy hypothesis*

4:30 – 5:30 Drew Moshier (Chapman) *On "logical" dual of compact Hausdorff Spaces*

6:30 Conference Dinner in Old Orange

27th Friday

9:00 – 10:00 André Villaveces (Univ. Nacional de Colombia): *Galoisian model theory: the role(s) of Grothendieck*
(à son insu !)

10:00 – 11:00 Olivia Caramello (Univ. of Insubria; by Zoom): *The “unifying notion” of topos*

11:00 – 11:15 Coffee Break

11:15 – 12:15 Mike Shulman (Univ. of San Diego): *Lifting Grothendieck universes to Grothendieck toposes*

12:15 – 1:15 José Gil-Ferez (Chapman Univ.) *The Isomorphism Theorem of Algebraic Logic: a Categorical Perspective*

1:15 – 2:30 Lunch

2:30 – 3:30 Oumar Wone (Chapman) : *Vector bundles on Riemann surfaces according to Grothendieck and his followers*

3:30 – 4:30 Claudio Bartocci (Univ. of Genova): *The inception of the theory of moduli spaces: Grothendieck's Quot scheme*

4:30 – 5:30 Christian Houzel (IUFM de Paris): *Riemann surfaces after Grothendieck* [presented by J.J. Szczeciniarz]

28th Saturday

9:00 – 10:00 Silvio Ghilardi (Univ. degli Studi, Milano): *Investigating definability in propositional logic via Grothendieck topologies and sheaves*

10:00 – 11:00 Matteo Viale (Univ. of Turin; by zoom): *The duality between Boolean valuated models and topological presheaves*

11:00 – 11:15 Coffee Break

11:15 – 12:15 Benjamin Collas (Kyoto Univ.): *Galois-Teichmüller: arithmetic geometric principles*

12:15 – 1:15 *Closing: general discussion animated by Alex Kurz (Chapman)*