

PROJECTIONS

***INTERNATIONAL SUMMER INSTITUTE IN PHILOSOPHY OF
PHYSICS ON THE PHILOSOPHY OF GRAVITY***

**WILLIAMS BAY, WISCONSIN, USA
JUNE 19-24, 2016**



KAĆA BRADONJIĆ

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PROJECTIONS

An academic talk and the subsequent discussion is a public display of an otherwise mostly closed-door affair, and it exposes the complex nature of the creation of knowledge. *Projections* is a series of artworks aiming to give visual representation to academic talks, mostly on the topics of physics and philosophy of physics. In a way, each *Projection* is a field report of my experience of a talk, which itself is a multidimensional beast existing in a space that exceeds the four-dimensional confines of a conference room. The talk is diffracted by my own sensibilities and projected onto the paper in real time. Some pieces are the projections of the abstract conceptual world of our models of reality and their symbolic representations: String, Loop, Set; Zero, Asymptotic, Infinity; State, Superposition, Entanglement. Others capture the emotional and the social dimensions of the talk: Enthusiasm, Self-doubt, Bravado; Camaraderie, Conflict, Agreement; Confusion, Insight, Understanding. Most of the *Projections*, however, are half-profiles: Confinement, Freedom, Exclusion; Interaction, Interference, Perturbation; Uncertainty, Confidence, Safety.

CONFERENCE INFORMATION

International Summer Institute in Philosophy of Physics on the Philosophy of Gravity
Space and Time After Quantum Gravity project

Williams Bay, Wisconsin, USA
June 19-24, 2016

Quantum theories of gravity, as diverse and incomplete as they may be, promise to revolutionize our conception of the fundamental structure of reality. For instance, the world we inhabit may be non-spatiotemporal at the ground level. The philosophical implications of quantum gravity may thus be far-reaching, but what exactly are these implications and how will they affect our philosophical conceptions? Conversely, the formulation of a quantum theory of gravity forces the theorists to address foundational, indeed philosophical questions, for their theory-building. Such questions include the metaphysical implications of quantum gravity, or the nature of phenomenological spacetime in string theory. These are just some of the questions that we will discuss in this Summer Institute, which addresses graduate students and postdocs from philosophy of physics and related fields.

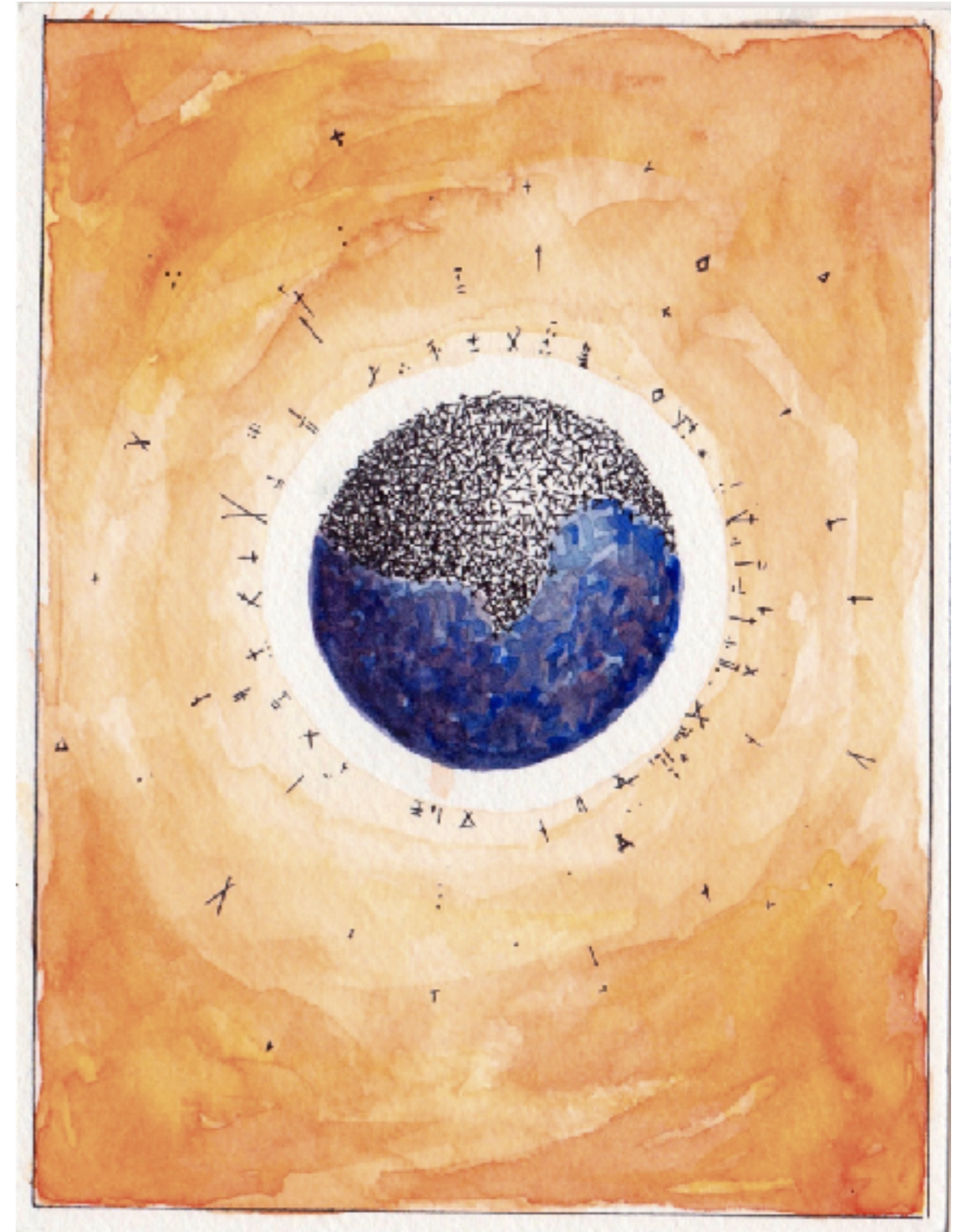
Organizers: Nick Huggett, Christian Wüthrich, and Keizo Matsubara

Conference Website: <https://beyondspacetime.net/2016summerschool/>

JUNE 20, 2016

**CHRISTIAN WÜTHRICH,
"QUANTUM GRAVITY: MOTIVATIONS
AND IMPLICATIONS"**

Watercolor on paper
5 7/8 x 4 1/2 in (15.1 x 11.5 cm)
June 19, 2016



Video recording: <https://youtu.be/SCRZPW5nN9A>

JENNAN ISMAEL, "SEEING SPACE"

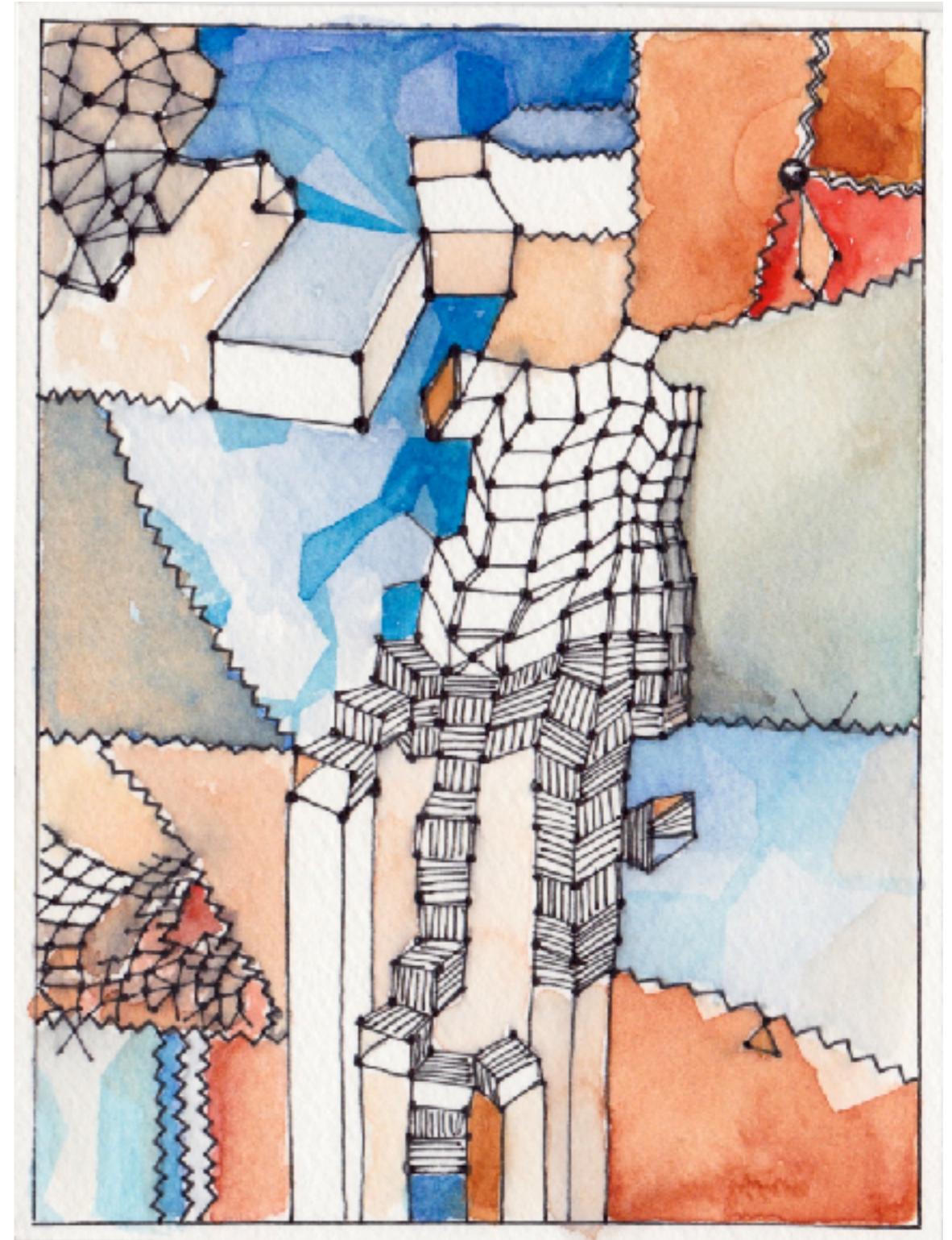
Watercolor on paper
5 7/8 x 4 1/2 in (15.1 x 11.5 cm)
June 20, 2016



Video recording: <https://youtu.be/mmMi9joitjs>

**EMERGENCE AND
CORRESPONDENCE READING
GROUP, DAY 1**

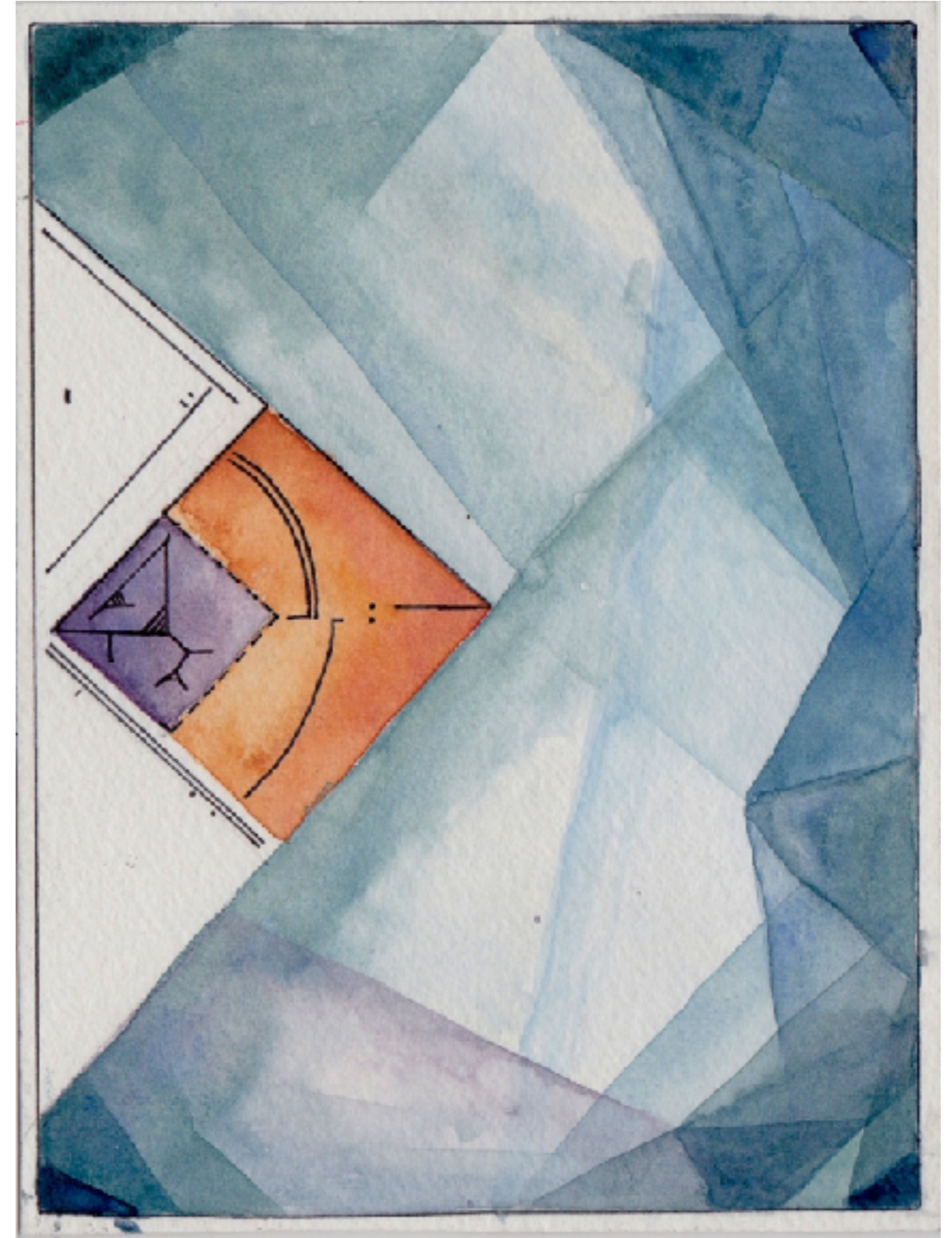
Watercolor on paper
5 7/8 x 4 1/2 in (15.1 x 11.5 cm)
June 20, 2016



Video recording: N/A

**CARLO ROVELLI, "SPACE AND
TIME (OR NOT?) IN LOOP QUANTUM
GRAVITY"**

Watercolor on paper
5 ⁷/₈ × 4 ¹/₂ in (15.1 × 11.5 cm)
June 20, 2016

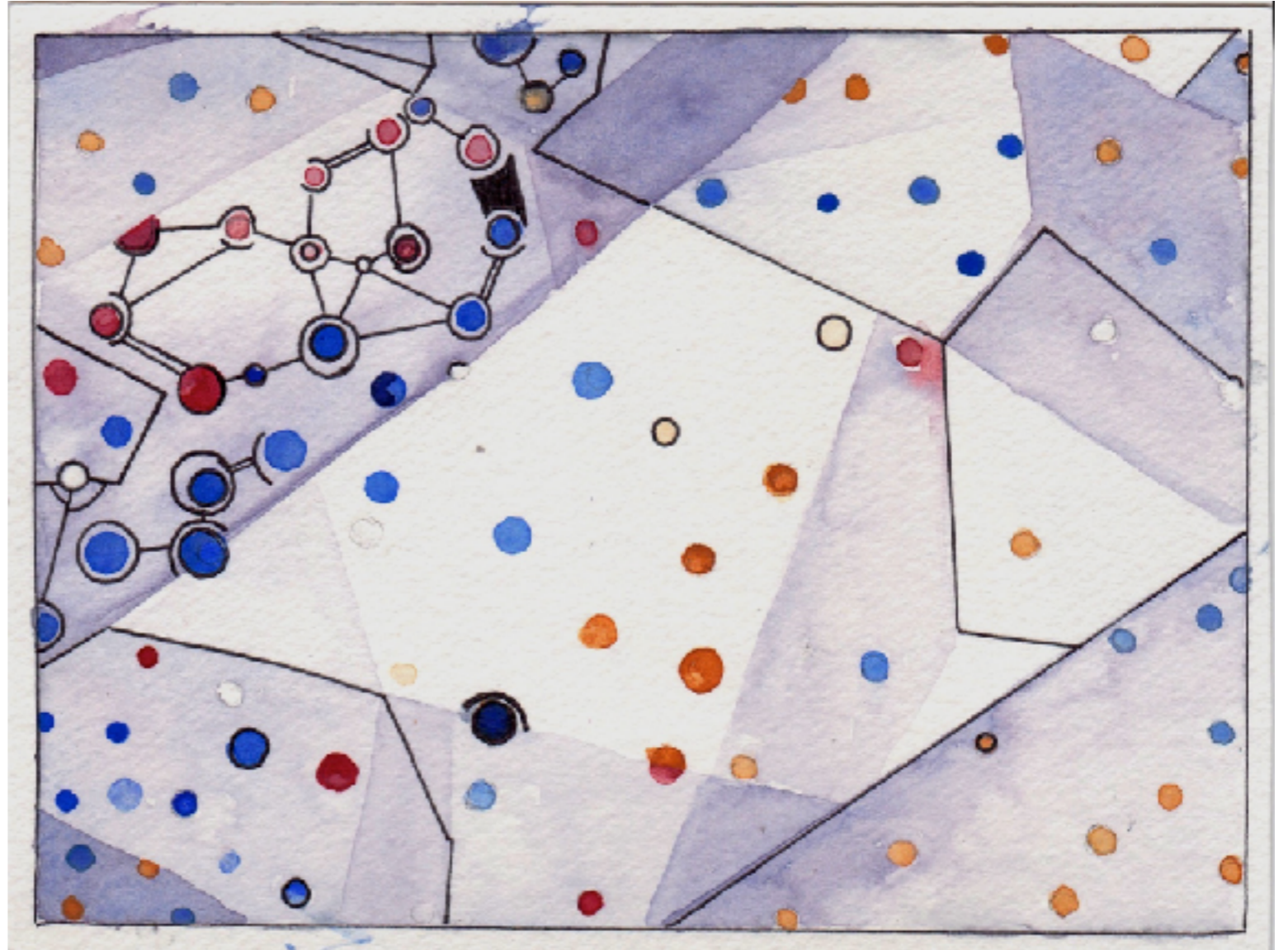


Video recording: https://youtu.be/8GWEPyhzn_U?

JUNE 21, 2016

**CARLO ROVELLI,
"IS TIME'S ARROW PERSPECTIVAL?"**

Watercolor on paper
4 1/2 x 5 7/8 in (11.51 x 15.1 cm)
June 21, 2016



Video recording: <https://youtu.be/cEx0A-TtACK>

**JENNAN ISMAEL, "TIME PERCEPTION,
PREDICTIVE PROCESSING, AND
WHAT ALL OF THIS HAS TO DO WITH PHYSICS"**

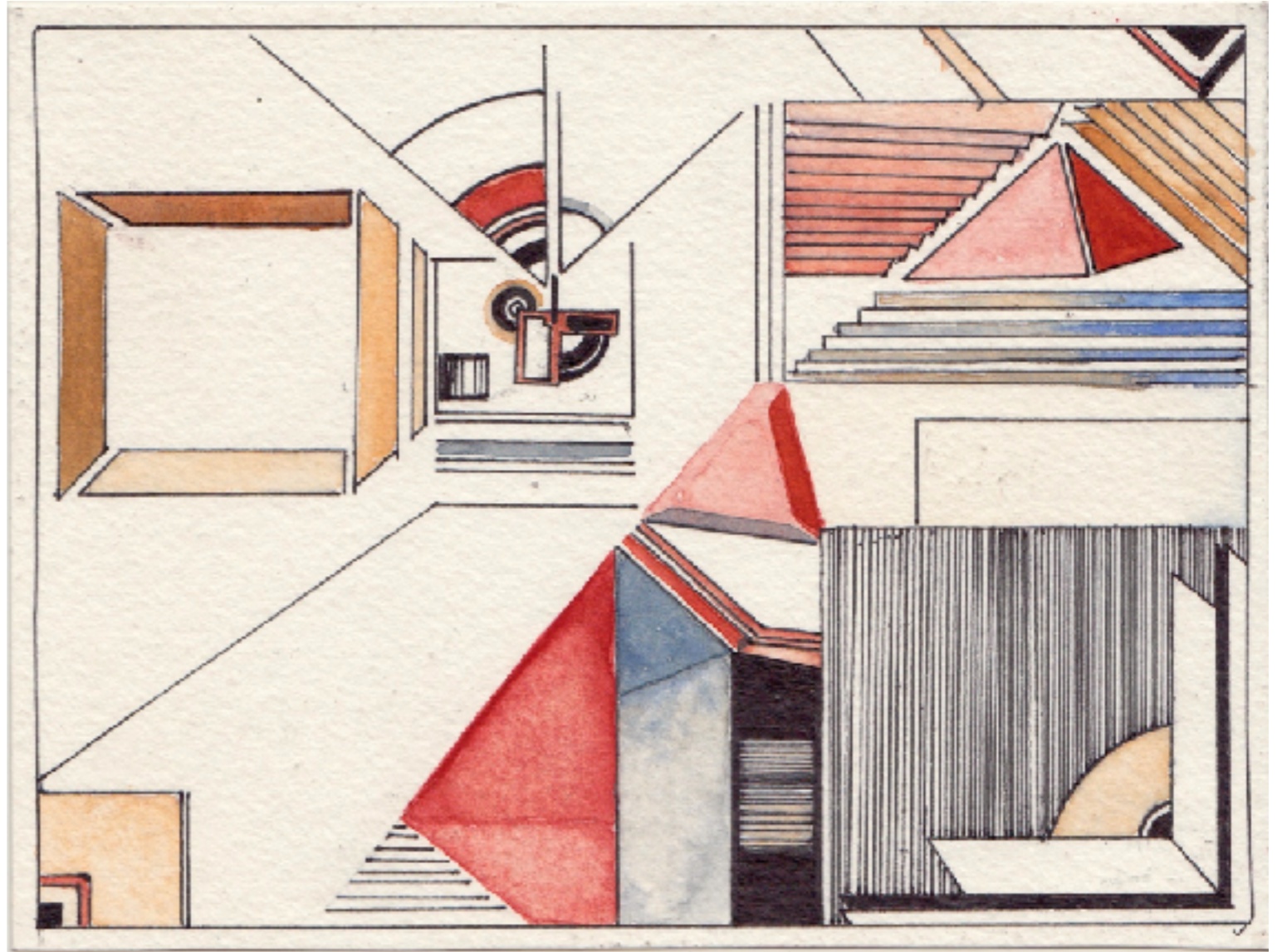
Watercolor on paper
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June 21, 2016



Video recording: N/A

**EMERGENCE AND
CORRESPONDENCE READING
GROUP, DAY 2"**

Watercolor on paper
4 1/2 x 5 7/8 in (11.51 x 15.1 cm)
June 21, 2016

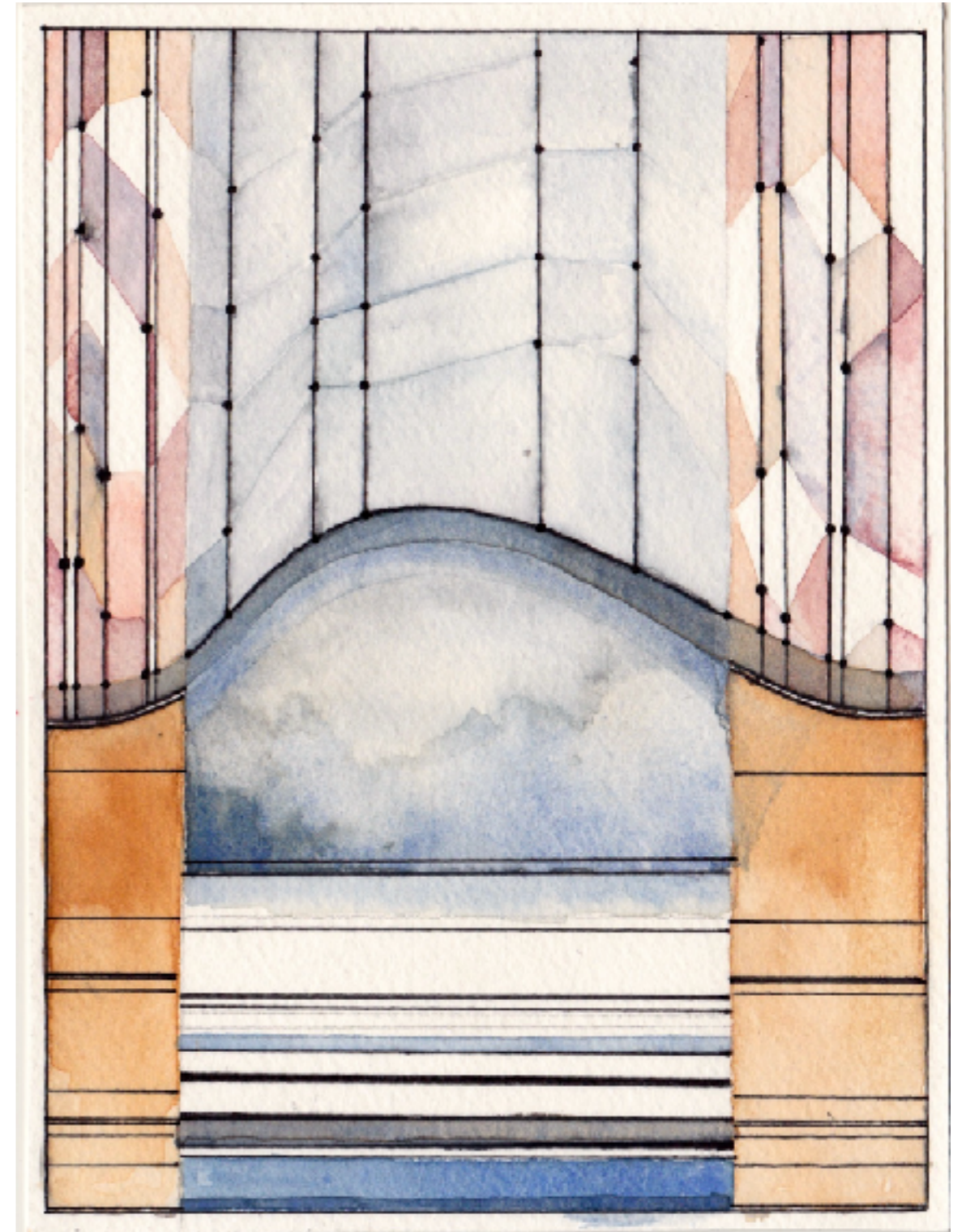


Video recording: N/A

JUNE 22, 2016

**GORDON BELOT,
"BACKGROUND INDEPENDENCE"**

Watercolor on paper
5 ⁷/₈ × 4 ¹/₂ in (15.1 × 11.5 cm)
June 22, 2016



Video recording: <https://youtu.be/IgkkW-C68So?>

**ALYSSA NEY, "FUNCTIONALIZING
SPACE IN QUANTUM MECHANICS",**

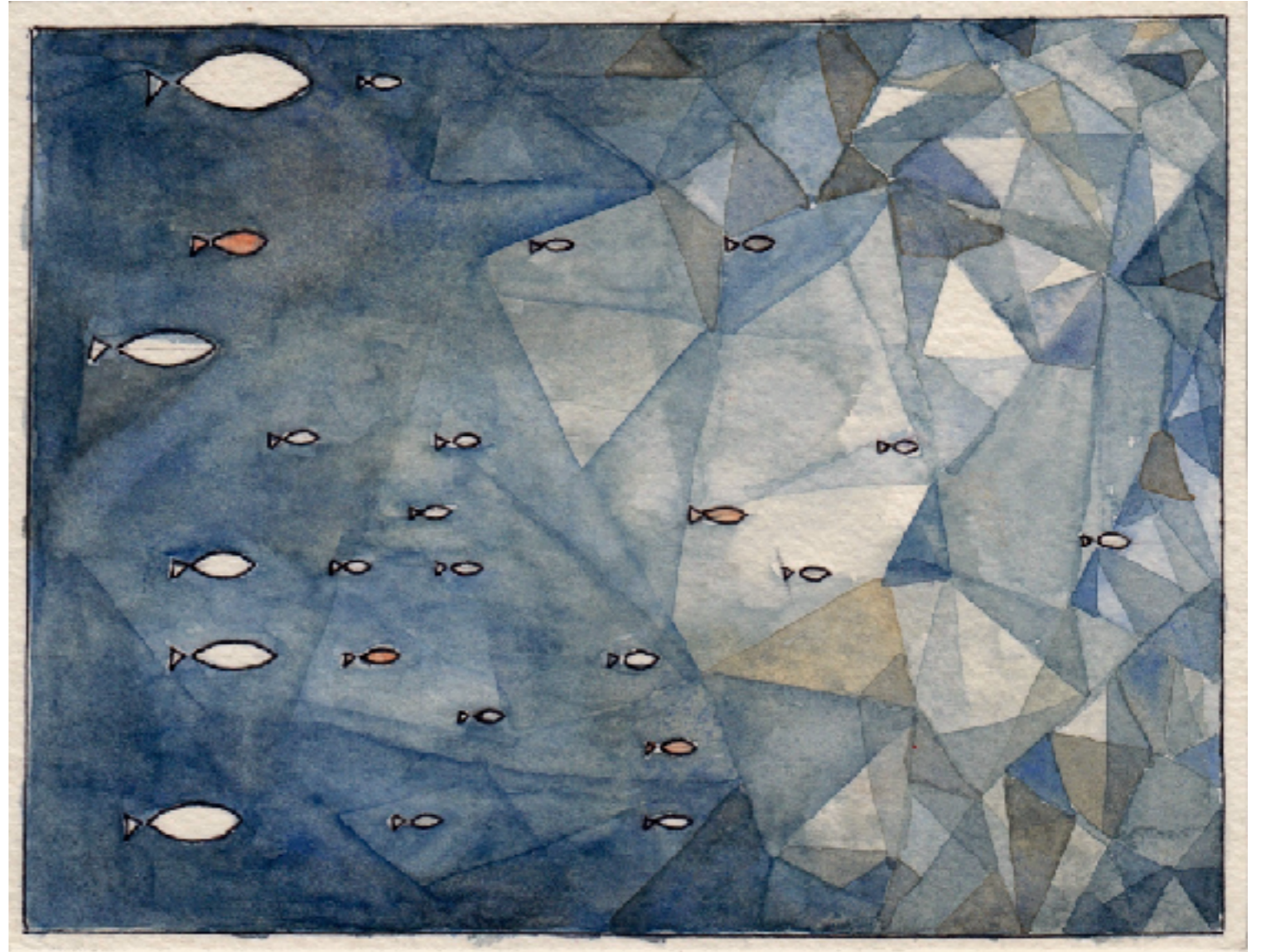
Watercolor on paper
4 1/2 x 5 7/8 in (11.51 x 15.1 cm)
June 22, 2016



Video recording: <https://youtu.be/loM5ZDKkeKw?>

**EMERGENCE AND
CORRESPONDENCE READING
GROUP, DAY 3"**

Watercolor on paper
4 1/2 x 5 7/8 in (11.51 x 15.1 cm)
June 22, 2016



Video recording: N/A

**ĐORĐE MINIĆ, "STRING THEORY
AN OVERVIEW"**

Watercolor on paper
4 1/2 x 5 7/8 in (11.51 x 15.1 cm)
June 22, 2016

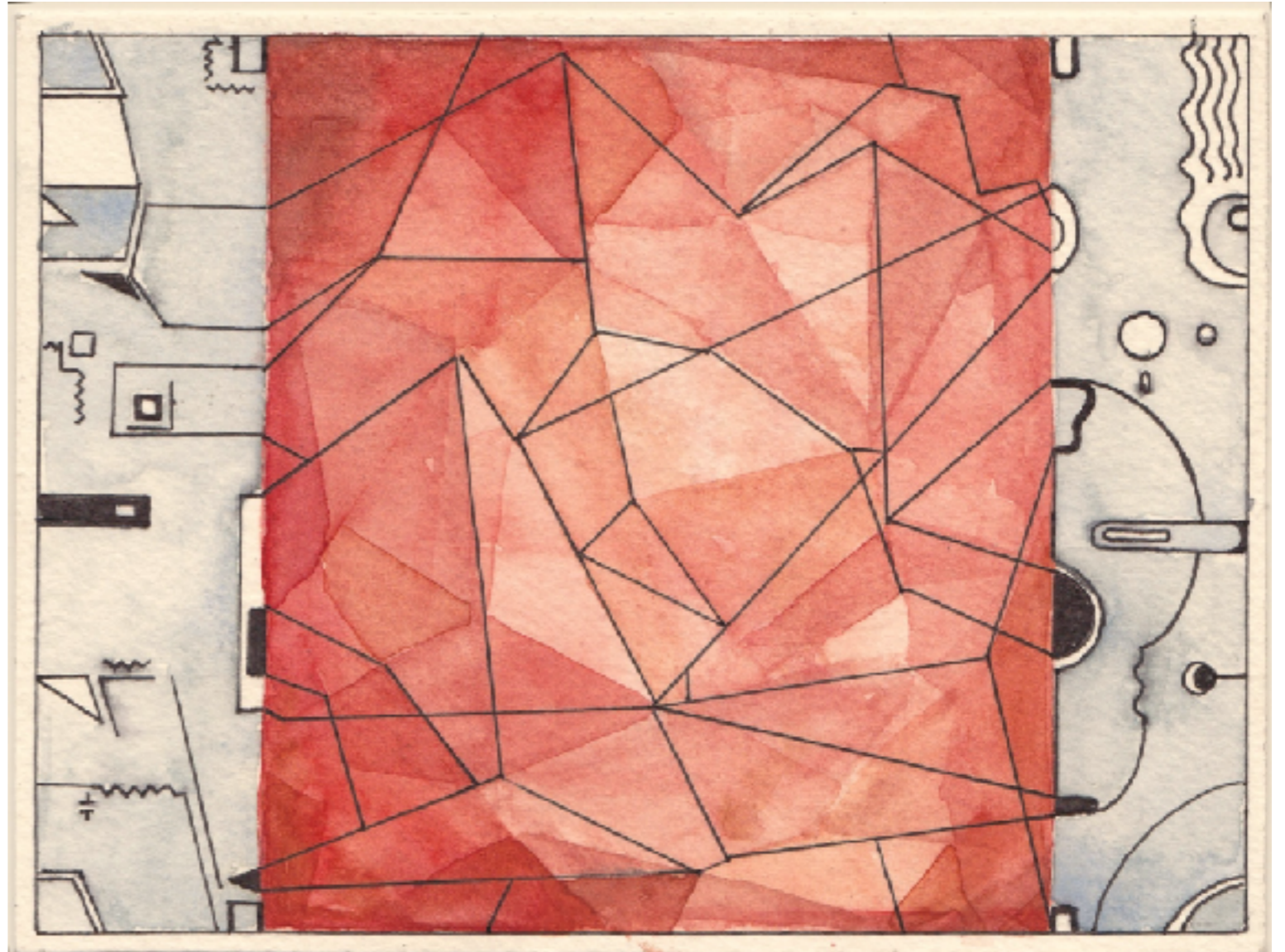


Video recording: <https://youtu.be/eHGwG-N3s-0?>

JUNE 23, 2016

**KEIZO MATSUBARA, "DUALITIES
AND SPACETIME IN STRING
THEORY"**

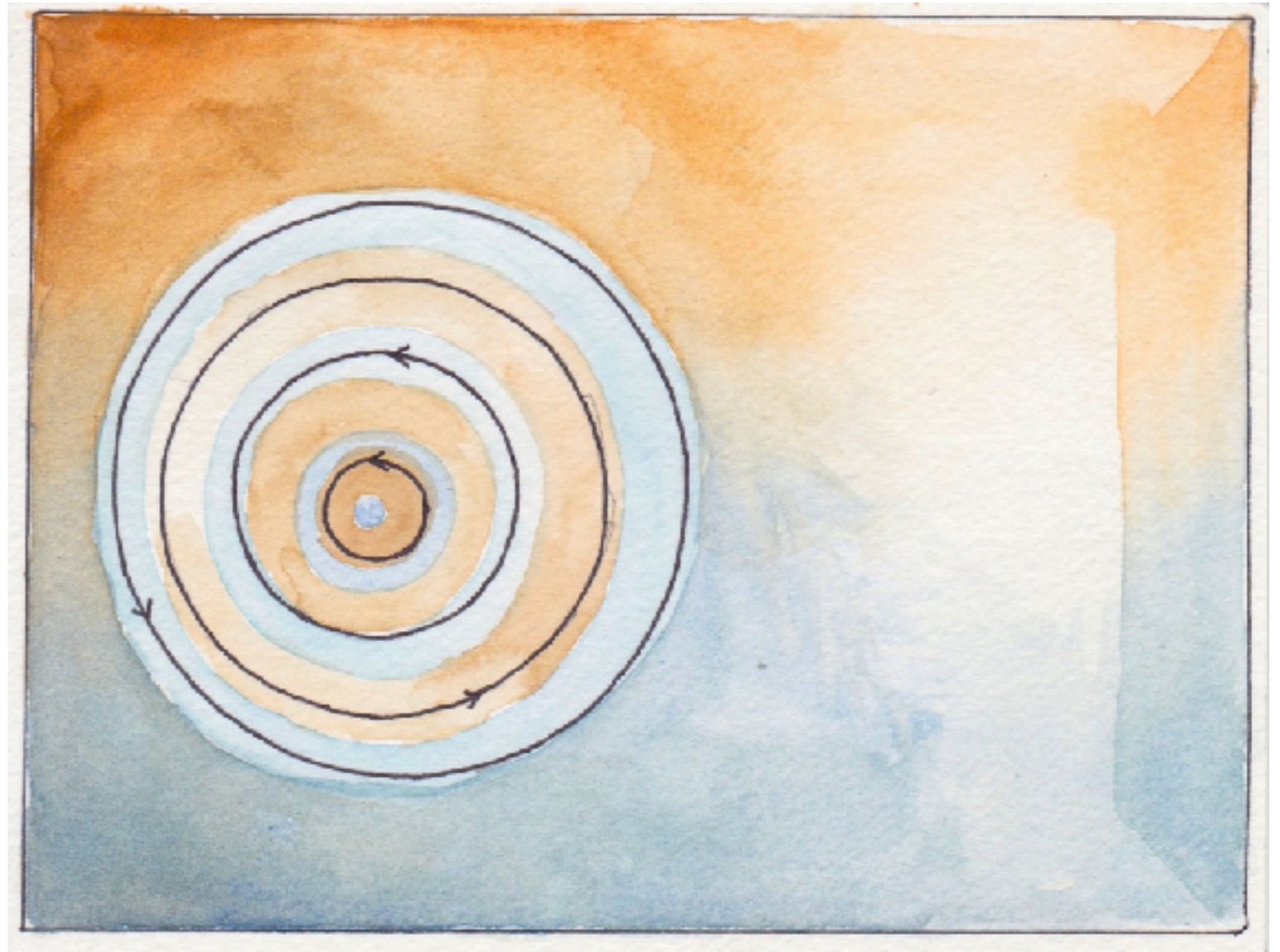
Watercolor on paper
4 1/2 x 5 7/8 in (11.51 x 15.1 cm)
June 23, 2016



Video recording: <https://youtu.be/iCHEy-QqyDA?>

**ĐORĐE MINIĆ, "MODULAR
SPACE-TIME AND METASTRING
THEORY"**

Watercolor on paper
4 1/2 x 5 7/8 in (11.51 x 15.1 cm)
June 23, 2016

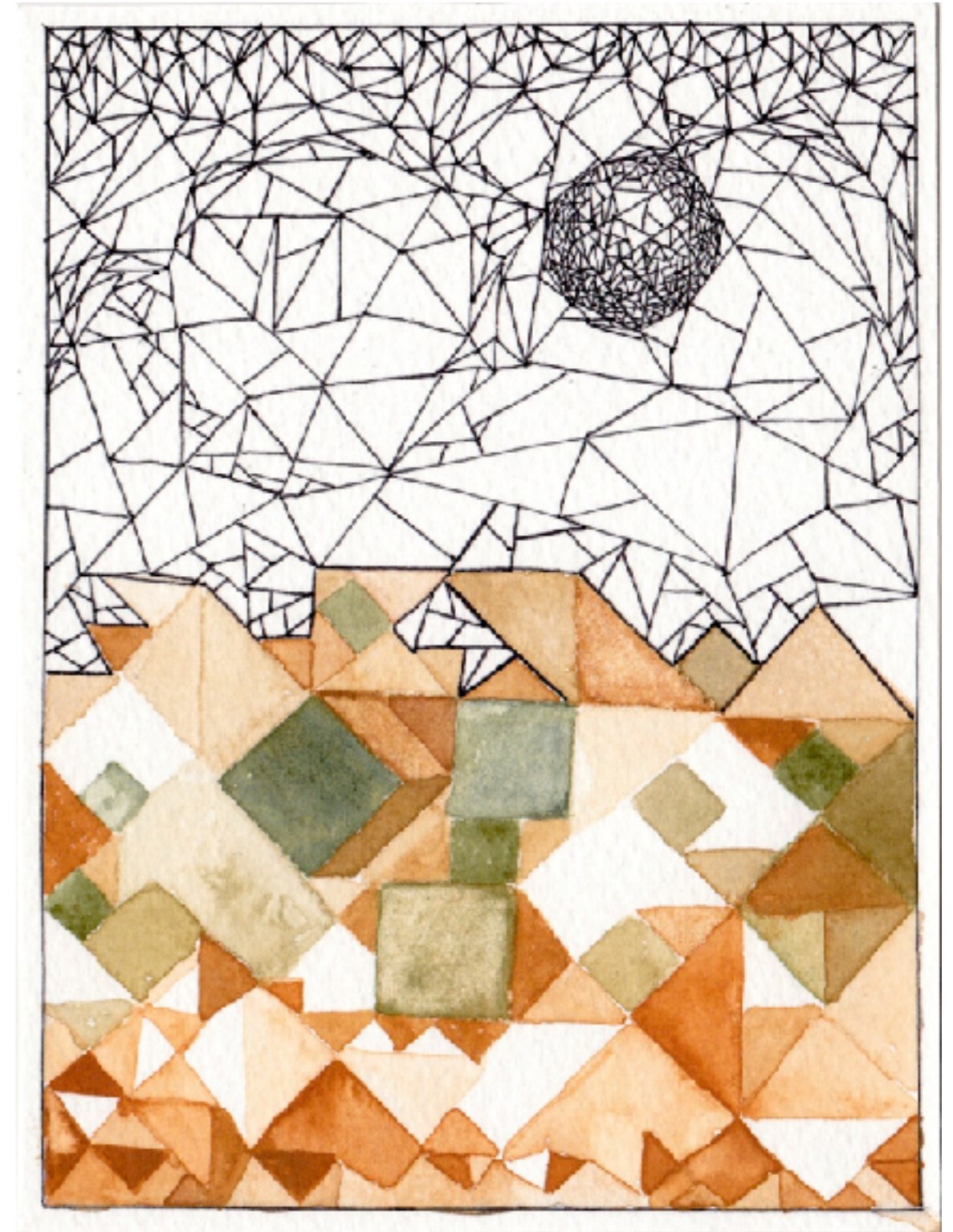


Video recording: <https://youtu.be/eHGwG-N3s-0?>

JUNE 24, 2016

ALYSSA NEY, "A PRIMER ON EMERGENCE"

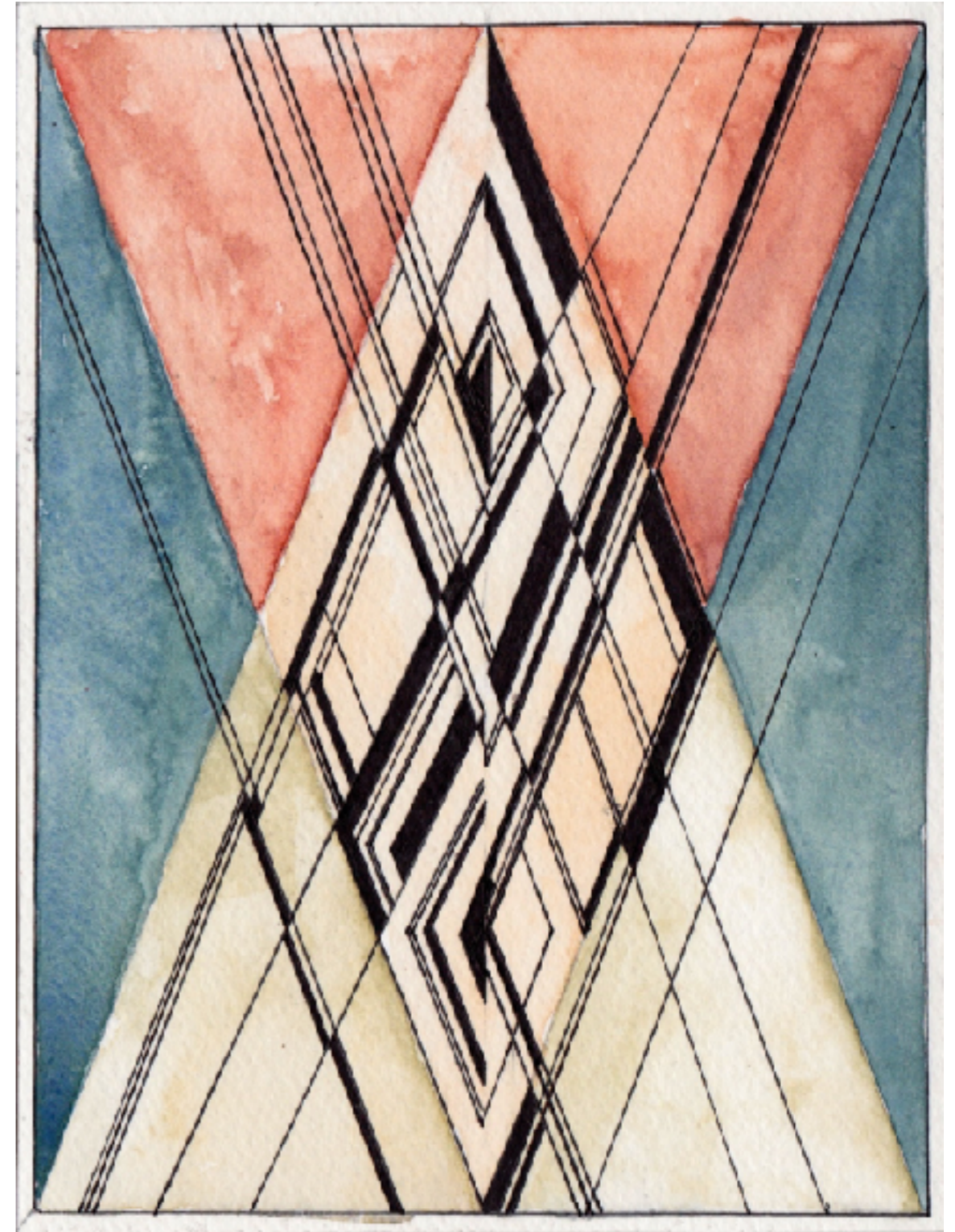
Watercolor on paper
5 ⁷/₈ × 4 ¹/₂ in (15.1 × 11.5 cm)
June 24, 2016



Video recording: https://youtu.be/gyBs_7xbZmY?

**GORDON BELOT, "TEN WEIRD
THINGS ABOUT DE SITTER
SPACETIME"**

Watercolor on paper
5 ⁷/₈ × 4 ¹/₂ in (15.1 × 11.5 cm)
June 24, 2016



Video recording: https://youtu.be/7fUkh_55WHk?

THE AUTHOR

Kaća Bradonjić is a visual artist and an Assistant Professor of Physics at Hampshire College, Amherst, MA.