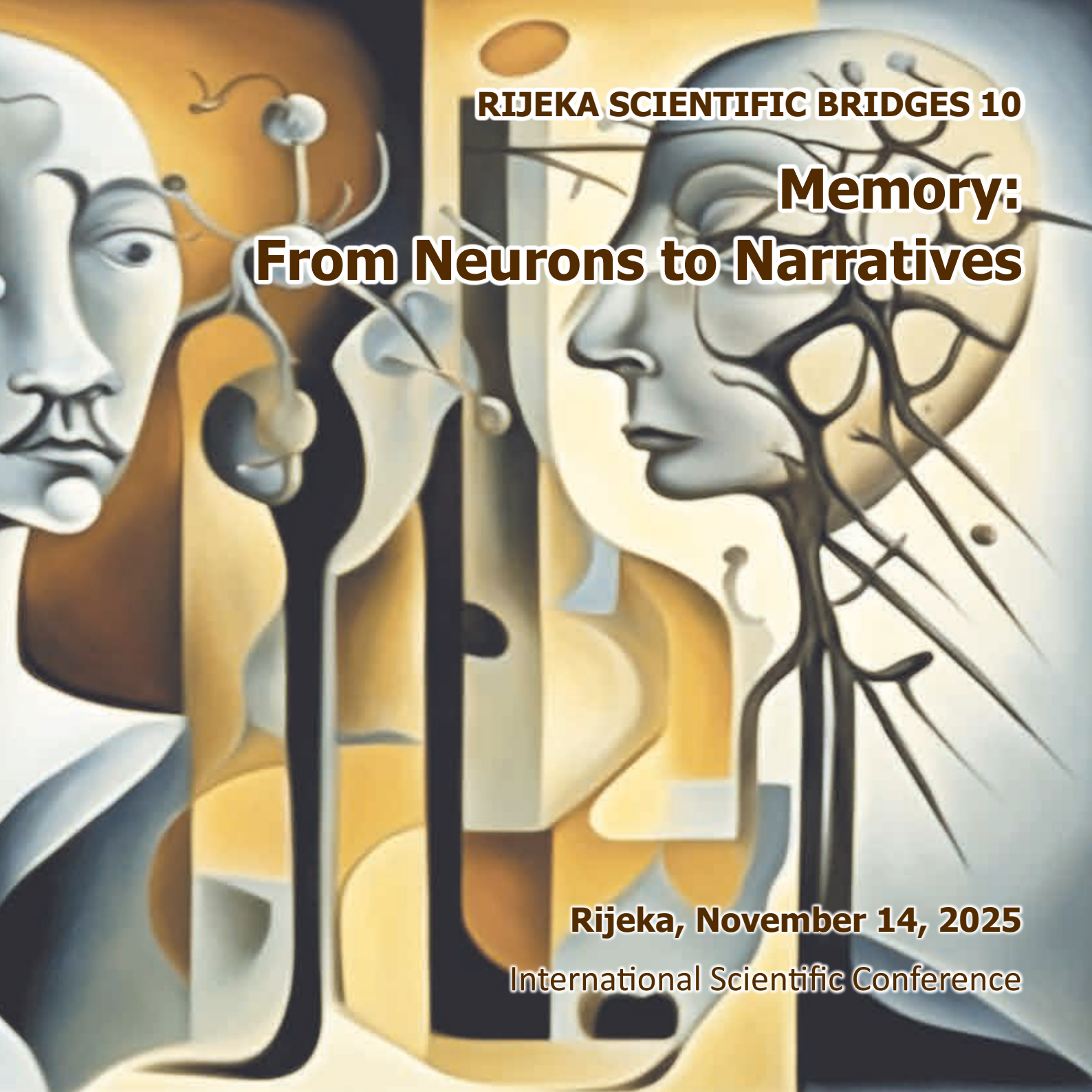




RIJEKA SCIENTIFIC BRIDGES 10

**Memory:
From Neurons to Narratives**

Rijeka, November 14, 2025

International Scientific Conference

Međunarodni znanstveni simpozij / *International Scientific Conference*
RIJEČKI ZNANSTVENI MOSTOVI 10 / *RIJEKA SCIENTIFIC BRIDGES 10*

Mrežna stranica *Riječkih znanstvenih mostova*
<https://rijecki-znanstveni-mostovi.com/>

Rijeka scientific bridges website
<https://rijecki-znanstveni-mostovi.com/en/home/>

University of Rijeka - Faculty of Medicine
University of Rijeka - Faculty of Health Studies
University of Zagreb - Catholic Faculty of Theology
Nicolaus Copernicus University of Toruń - Faculty of Theology
Universitat Abat Oliba CEU / Research group „Person and Personal Life“ (Prosopon)

RIJEKA SCIENTIFIC BRIDGES 10

Memory: From Neurons to Narratives

International Scientific Conference

Rijeka, November 14, 2025

Faculty of Health Studies, University of Rijeka
Great Hall of Professor Alan Šustić
Viktora Cara Emina 5, Rijeka, Hrvatska

Rijeka scientific bridges website
<https://rijecki-znanstveni-mostovi.com/en/home/>

Sveučilište u Rijeci – Medicinski fakultet

Sveučilište u Rijeci – Fakultet zdravstvenih studija

Sveučilište u Zagrebu – Katolički bogoslovni fakultet

Uniwersytet Mikołaja Kopernika w Toruniu – Wydział Teologiczny

Universitat Abat Oliba CEU / Istraživačka grupa „Person and Personal Life“ (Prosopon)

RIJEČKI ZNANSTVENI MOSTOVI 10

Memorija: od neurona do narativa

Međunarodni znanstveni simpozij

14. studenog 2025.

Fakultet zdravstvenih studija, Sveučilište u Rijeci

Velika dvorana prof. dr. sc. Alana Šustića

Viktora Cara Emina 5, Rijeka, Hrvatska

Mrežna stranica *Riječkih znanstvenih mostova*

<https://rijecki-znanstveni-mostovi.com/>

Impressum

Knjižica sažetaka

Memorija: od neurona do narativa

Međunarodni znanstveni simpozij RIJEČKI ZNANSTVENI MOSTOVI 10

Nakladnik:

Fakultet zdravstvenih studija Sveučilišta u Rijeci

Za nakladnika:

Prof. dr. sc. Daniela Malnar, dr. med., dekanica Fakulteta zdravstvenih studija Sveučilišta u Rijeci

Urednik:

Izv. prof. dr. sc. Saša Horvat

Za jezik i iznijete ideje odgovaraju isključivo potpisnici priloga.

Rijeka, 2025.

Priprema za tisak i tisak:

Grafomark d.o.o., Zagreb

Tiskano u studenom 2025.

ISBN 978-953-8447-08-2

CIP zapis dostupan u računalnom katalogu Sveučilišne knjižnice Rijeka pod brojem 001284482.

Impressum

Book of Abstracts

Memory: From Neurons to Narratives

International Scientific Conference RIJEKA SCIENTIFIC BRIDGES 10

Publisher:

University of Rijeka, Faculty of Health Studies

For the publisher:

Prof. Daniela Malnar, Ph.D., Dean of the Faculty of Health Studies, University of Rijeka

Editor:

Associate Professor Saša Horvat

The authors of abstracts are solely responsible for the language and ideas presented.

Rijeka, 2025

Prepress and printing:

Grafomark d.o.o., Zagreb

Printed in November 2025

ISBN 978-953-8447-08-2

CIP record available in the computer catalog of the University Library Rijeka under the number 001284482.

Sadržaj / Content

Conference Program	7
Program simpozija	10
Introduction to the topic of the conference	13
Uvod u temu simpozija	14
Abstracts / Sažeci	15
Organizing Committee / Organizacijski odbor simpozija	38
Scientific Committee / Znanstveni odbor simpozija	39

Conference Program

9.00 – Opening of the conference and welcome speeches

First block of lectures (inperson/online)

9.15 – **Prof. Amir Muzur** (Croatia)

The Meaning and Fate of Memory in Light of the Progress of Artificial Intelligence

9.30 – **Prof. Tomasz Dutkiewicz** (Poland)

Memory as a Component of the Virtue of Prudence – Aretological Aspect of Reflection on Memory

9.45 – **Prof. John Anthony Berry** (Malta)

Augustine on Memory before Neuroscience

10.00 – Discussion

10.15 – Short break

Second block of lectures

10.30 – **Dr. Sandra Domitrović Spudić** (Croatia)

Association between Brain-Derived Neurotrophic Factor and Cognition in Veterans with Posttraumatic Stress Disorder

10.45 – **Assoc. Prof. Ana Begić** (Croatia), **Prof. Vladimir Dugalić** (Croatia)

Anamnesis of Conscience – Expression of Personality and the Human Person's Inner Integrity

11.00 – **Dr. Berenika Seryczyńska** (Croatia)

Footprints of Memory. The Restorative Role of Pilgrimage as an Experience of Tradition and Values

11.15 – Discussion

11.30 – Break

Third block of lectures (online)

- 11.45 – **Dr. Buki Fatona** (United Kingdom)
Embodied Constructivism: The Imagination as a Vehicle for Mental Time Travel
- 12.00 – **Prof. Marcin Kazmierczak** (Spain)
The Obstinate Memory of the Origin: A Reading of the Modern Myth as a Reworking of the Classical Wisdom
- 12.15 – **Prof. Enrique Martínez** (Spain)
The Rootedness of Intellect and Will in Memory, According to Thomas Aquinas
- 12.30 – Discussion
- 12.45 – Break

Fourth block of lectures (inperson/online)

- 13.10 – **Assoc. Prof. Saša Horvat** (Croatia)
Snapshots of Being: Memory, Self, and Photography
- 13.25 – **Prof. Marko Medved** (Croatia)
Memory in Relation to Historical Science and the History of Medicine
- 13.40 – **Assoc. Prof. Natalie Nenadic** (United States)
AI Deepfake Pornography: Attacking the Future Through Attacking Memory
- 13.55 – **Asst. Prof. Youngjin Kiem** (South Korea)
A Husserlian Treatment of Memory and Forgetting and Its Application to the Design of Religious AI:
A Prolegomenon
- 14.10 – Discussion and closing of the conference

14.30 – **Book Presentation**

Saša Horvat & Piotr Roszak (Eds.), *Neuroscience of Religion: Integrating Brain, Mind, and Beliefs*, Springer, 2025.

The book is published as part of the project “Philosophy of (Neuro)Science and Theology: Understanding Data, Methods, and Results of the Neuroscience of Religion”

Presenters:

Piotr Roszak (Poland) and **Saša Horvat** (Croatia), Editors of the volume

Lluis Oviedo (Italy), Editor of the Springer book series “New Approaches to the Scientific Study of Religion”

Program simpozija

9.00 – Otvaranje simpozija i pozdravne riječi

Prvi blok predavanja

9.15 – **Prof. Amir Muzur, dr. med.** (Hrvatska)

Smisao i sudbina pamćenja u svjetlu progressa umjetne inteligencije

9.30 – **Prof. Tomasz Dutkiewicz** (Poljska)

Memory as a Component of the Virtue of Prudence – Aretological Aspect of Reflection on Memory

9.45 – **Prof. John Anthony Berry** (Malta)

Augustine on Memory before Neuroscience

10.00 – Rasprava

10.15 – Kratki predah

Drugi blok predavanja

10.30 – **Dr. Sandra Domitrović Spudić, dr. med.** (Hrvatska)

Povezanost moždanog neurotrofnog čimbenika i kognicije u veterana s posttraumatskim stresnim poremećajem

10.45 – **Izv. prof. Ana Begić** (Hrvatska), **prof. Vladimir Dugalić** (Hrvatska)

Anamnesis savjesti – izričaj osobnosti i unutarnje cjelovitosti čovjeka

11.00 – **Dr. Berenika Seryczyńska** (Hrvatska)

Footprints of Memory. The Restorative Role of Pilgrimage as an Experience of Tradition and Values

11.15 – Rasprava

11.30 – Kratki predah

Treći blok predavanja (online)

- 11.45 – **Dr. Buki Fatona** (Velika Britanija)
Embodied Constructivism: The Imagination as a Vehicle for Mental Time Travel
- 12.00 – **Prof. Marcin Kazmierczak** (Španjolska)
The Obstinate Memory of the Origin: A Reading of the Modern Myth as a Reworking of the Classical Wisdom
- 12.15 – **Prof. Enrique Martínez** (Španjolska)
The Rootedness of Intellect and Will in Memory, According to Thomas Aquinas
- 12.30 – Rasprava
- 12.45 – Predah

Četvrti blok predavanja (uživo/online)

- 13.10 – **Izv. prof. Saša Horvat** (Hrvatska)
Isječci postojanja: memorija, sebstvo i fotografija
- 13.25 – **Prof. Marko Medved** (Hrvatska)
Pamćenje u odnosu na povijesnu znanost i povijest medicine
- 13.40 – **Izv. prof. Natalie Nenadic** (Sjedinjene Američke Države)
AI Deepfake Pornography: Attacking the Future Through Attacking Memory
- 13.55 – **Dr. sc. Youngjin Kiem** (Južna Koreja)
A Husserlian Treatment of Memory and Forgetting and Its Application to the Design of Religious AI: A Prolegomenon
- 14.10 – Rasprava i zatvaranje konferencije

14.230 – Predstavljanje knjige:

Saša Horvat i Piotr Roszak (ur.), *Neuroscience of Religion: Integrating Brain, Mind, and Beliefs*, Springer, 2025.

Knjiga je objavljena u sklopu projekta “Philosophy of (Neuro)Science and Theology: Understanding Data, Methods, and Results of the Neuroscience of Religion”

Predstavljajući:

Piotr Roszak (Poljska) i **Saša Horvat** (Hrvatska), urednici zbornika

Lluis Oviedo (Italija), urednik Springerove biblioteke “New Approaches to the Scientific Study of Religion”

Introduction to the topic of the conference

The tenth jubilee edition of the international scientific symposium *Rijeka Scientific Bridges*, titled *Memory: From Neurons to Narratives*, brings together scholars from diverse disciplines to explore the phenomenon of memory — from its biological foundations to its cultural and spiritual expressions. Memory, understood as the cornerstone of both personal and collective identity, connects neuroscience, psychology, philosophy, theology, and history in a dialogue that illuminates what it means to remember, to forget, and to interpret experience.

At the forefront lies the question of how memory interacts with contemporary technologies, particularly artificial intelligence, which increasingly shapes our ways of thinking and storing knowledge. The discussions will address how digitalization and algorithms transform the concepts of memory and truth (Muzur, Nenadic), as well as how memory relates to the virtue of prudence and moral action (Dutkiewicz, Begić and Dugalić). Theological and philosophical approaches — from Thomas Aquinas to (neuro)phenomenology and hermeneutics (Martínez, Kiem, Kazmierczak, Berry) — will also be explored to better understand the link between memory, will, and truth. On another level, the conference highlights medical and psychological aspects of memory, such as the role of neurotrophic factors in cognition, the traces of memory in trauma, and the remembrance within the history of medicine (Domitrović Spudić, Medved). The spiritual and aesthetic dimensions of memory emerge through reflections on pilgrimage, photography, and personal narrative as ways of renewing identity (Seryczyńska, Horvat).

As in previous years, *Rijeka Scientific Bridges* remains a space of encounter and connection — a bridge between neurons and narratives, between science and meaning.

Organizing committee:

Dr. Saša Horvat (Rijeka), president, Dr. Amir Muzur (Rijeka), Dr. Piotr Roszak (Toruń)
 Dr. Enrique Martínez (Barcelona), Dr. Nenad Malović (Zagreb), Dr. Franjo Mijatović (Rijeka)
 Dr. Veronika Nela Gašpar (Zagreb), Dr. Marko Medved (Rijeka), Dr. Branko Murić (Zagreb)
 Dr. Berenika Seryczyńska (Rijeka)

Uvod u temu simpozija

Jubilarni deseti međunarodni znanstveni simpozij *Riječki znanstveni mostovi*, pod naslovom *Memorija: od neurona do narativa*, okuplja znanstvenike različitih profila kako bi zajedno istražili fenomen pamćenja – od njegovih bioloških temelja do njegovih kulturnih i duhovnih izraza. Pamćenje, shvaćeno kao središnji oslonac osobnog i kolektivnog identiteta, povezuje neuroznanost, psihologiju, filozofiju, teologiju i povijest u dijalog koji osvjetljava što znači pamtiti, zaboraviti i tumačiti iskustvo.

U prvom planu nalazi se pitanje odnosa između pamćenja i suvremenih tehnologija, posebno umjetne inteligencije, koje oblikuju naše načine mišljenja i pohrane znanja. Rasprave će obuhvatiti kako digitalizacija i algoritmi mijenjaju pojam sjećanja i istine (Muzur, Nenadić), ali i kako se memorija povezuje s vrlinom razboritosti i moralnim djelovanjem (Dutkiewicz, Begić i Dugalić). U fokusu su i teološko-filozofski pristupi pamćenju – od Tome Akvinskog do (neuro)fenomenologije i hermeneutike (Martínez, Kiem, Kazmierczak, Berry) – koji nastoje razumjeti vezu između sjećanja, volje i istine. S druge strane, prikazat će se i konkretni medicinski i psihološki aspekti pamćenja – uloga neurotrofnih čimbenika u kogniciji, tragovi sjećanja u traumi, kao i memorija u povijesti medicine (Domitrović Spudić, Medved). Duhovna i estetska dimenzija očituje se u razmatranju hodočašća, fotografije i osobnog narativa kao oblika obnove identiteta (Seryczyńska, Horvat).

Kao i prethodnih godina, *Riječki znanstveni mostovi* ostaju prostor susreta i povezivanja – most između neurona i narativa, između znanosti i smisla.

Organizacijski odbor:

Dr. Saša Horvat (Rijeka), predsjednik, Dr. Amir Muzur (Rijeka), Dr. Piotr Roszak (Toruń)
 Dr. Enrique Martínez (Barcelona), Dr. Nenad Malović (Zagreb), Dr. Franjo Mijatović (Rijeka)
 Dr. Veronika Nela Gašpar (Zagreb), Dr. Marko Medved (Rijeka), Dr. Branko Murić (Zagreb)
 Dr. Berenika Seryczyńska (Rijeka)

Abstracts / Sažeci

Martina s. Ana Begić / Vladimir Dugalić

Anamnesis savjesti – izričaj osobnosti i unutarnje cjelovitosti čovjeka

U suvremenoj raspravi o tome što tvori srž moralnosti, pitanje savjesti postalo je neizmjerljivo važno. U odmaku od morala čina i dužnosti, koji je pre naglasio ulogu razuma i zakona, savjest zadobiva središnje mjesto jer ona prosuđuje čovjekove čine i o njima donosi moralni sud. Taj sud savjesti ima zapovjedni karakter te čovjek mora postupati u skladu s njim, odnosno, po uvjerenju vlastite savjesti kako bi ostao dosljedan samome sebi. Istovremeno, moralnost čina određuje se po odnosu čovjekove slobode s izvornim dobrom te moralni čini izražavaju i odlučuju o dobroti ili zloći samoga čovjeka koji te čine izvodi. Može se stoga reći da moralna savjest daje svjedočanstvo čestitosti ili zloće samog čovjeka. Savjest je ono „hermeneutičko mjesto” gdje osoba doživljava svoju potpunu unutarnju povezanost sa svojim uvjerenjem te otvara čovjeka prema drugome. Papa Benedikt XVI., u svom eseju o savjesti, razlikuje *syneidesis* (sud savjesti) od same unutarnje sklonosti činiti dobro, a izbjegavati zlo i koju tradicionalni nauk naziva *synderesis*. Međutim, ovu sklonost, pozivajući se na Platonov pojam, on naziva *anamnesis* (grč. spomen) i određuje je kao pozivanje na ono što tvori samo naše biće, kada je posrijedi činjenje dobra i izbjegavanje zla. U nas je usađeno nešto nalik na izvorno sjećanje na dobro i istinito te u čovjeku postoji nutarnje ontološko nagnuće prema dobru. *Anamnesis* nije znanje raščlanjeno u pojmovima, nego izričaj nutarnjeg smisla, prepoznavanja istinskog dobra. Ovo „sjećanje”, „spomen” treba braniti od razaranja sjećanja kojemu prijeti subjektivnost zaborava i etički relativizam kao i pritisci društvene i kulturalne prilagodbe. Na taj način savjest je očitovanje cjelokupne ljudske osobnosti. Ne samo da dobri čini izgrađuju, a zli razgrađuju čovjeka u njegovoj nutrini, nego je savjest i izričaj osobnog iskustva (sjećanja) i usvojenog sustava vrijednosti koji pomažu u donošenju moralnih sudova.

Izv. prof. dr. sc. Martina s. Ana Begić

Katolički bogoslovni fakultet Sveučilišta u Zagrebu
ana.begic@gmail.com

Prof. dr. sc. Vladimir Dugalić

Katolički bogoslovni fakultet u Đakovu Sveučilišta u Osijeku
vladimir.dugalic1@gmail.com

Anamnesis of Conscience – Expression of Personality and the Human Person's Inner Integrity

In contemporary discourse on the foundations of morality, the question of conscience has acquired paramount significance. In contrast to moral theories of acts and duties, which tended to overemphasize the role of reason and law, conscience emerges as central, for it evaluates human actions and delivers moral judgment upon them. Such judgment possesses a binding character: one is obliged to act in accordance with it, that is, in accordance with the dictates of one's own conscience, if one is to remain consistent with oneself. At the same time, the moral quality of an action is determined by the relation of human freedom to the original good, such that moral acts both express and determine the goodness or evil of the agent who performs them. It may thus be said that moral conscience bears witness to the integrity or corruption of the person as such. Conscience constitutes that "hermeneutical locus" in which the individual experiences a profound inner unity with their own conviction, while simultaneously being opened toward the other. In his essay on conscience, Pope Benedict XVI distinguishes *syneidesis* (the judgment of conscience) from the innate inclination to do good and avoid evil, traditionally designated as *synderesis*. Yet, drawing upon Plato's concept, he terms this inclination *anamnesis* (Greek: remembrance), defining it as a recollection of that which constitutes the very essence of our being in relation to the doing of good and the avoidance of evil. Implanted within us is something akin to an original memory of the good and the true, and within the human person there abides an inner ontological orientation toward the good. *Anamnesis* is not knowledge discursively articulated in concepts, but rather an expression of

interior meaning, of the recognition of authentic good. This “remembrance” must be safeguarded against the erosion of memory threatened by subjective forgetfulness, ethical relativism, and the pressures of social and cultural conformity. Thus, conscience is to be understood as a manifestation of the entirety of the human personality. Not only do good acts build up, while evil acts corrode, the human person from within, but conscience also functions as the expression of personal experience (memory) and of an internalized system of values, both of which assist in the formation of moral judgments.

Assoc. Prof. Ana Begić, Ph.D.

Faculty of Catholic Theology, University of Zagreb

ana.begic@gmail.com

Prof. Vladimir Dugalić, Ph.D.

Faculty of Catholic Theology in Đakovo, University of Osijek

vladimir.dugalic1@gmail.com

John Anthony Berry

Augustine on Memory before Neuroscience

This study offers an original neurophenomenological reading of Augustine's Confessions Book X, arguing that his theology of memory provides conceptual and methodological resources for contemporary cognitive neuroscience. While existing scholarship has noted Augustine's proto-taxonomy of memory, few studies examine how his affective, ethical, and interior dimensions can inform empirical research on cognition.

By analysing Augustine's *memoria affectiva*, the "memory of forgetting," and memory as an interior space for self-reflection and divine encounter, this research demonstrates how memory functions as a site of cognitive, affective, and moral integration. In dialogue with contemporary neuroscience—including studies on episodic, semantic, and procedural memory, neural networks such as the hippocampus, amygdala, and default-mode network, and emerging research on moral and affective cognition—Augustine's phenomenology offers both points of convergence and critical challenge to reductionist accounts, while providing a framework for testable hypotheses and neuroethical reflection.

The study is structured in three parts: Part I examines Augustine's phenomenology of memory; Part II situates these insights within contemporary neuroscience; and Part III develops an integrative neurophenomenological model, proposing empirical hypotheses and exploring implications for neuroethics, moral cognition, and philosophy of mind. This approach positions Augustine as a constructive interlocutor for cognitive science, offering a distinctive perspective on memory, selfhood, and temporal consciousness.

Prof. John Anthony Berry

Faculty of Theology, University of Malta

john.berry@um.edu.mt

Tomasz Dutkiewicz

Memory as a Component of the Virtue of Prudence – Aretological Aspect of Reflection on Memory

The interdisciplinary nature of the planned conference itself can be seen as a proof of the multidimensionality of the issue of human memory. The aim of this presentation is to present the role of memory in the context of aretology.

The issue of virtue occupies a central place in classical ethics. Philosophical reflection on this issue appears already with the father of ethics, Socrates, and in the work of Plato we find the first classification of virtues, which St. Ambrose would later call cardinal. An in-depth analysis of the issue of virtue was carried out by Aristotle, whose *Nicomachean Ethics* is one of the most frequently read and commented on classical philosophical texts. In the Middle Ages, St. Thomas Aquinas would draw on the achievements of ancient thinkers to develop his exposition of aretology, which would become the foundation of Catholic moral theology in later centuries.

In addressing the issue of the virtue of prudence, Aquinas points to memory as an essential component of this virtue, which enables a person to choose the right paths to achieve their intended goals. Memory – as Thomas notes – allows us to collect and store life experiences, which are of significant importance from the point of view of the ability to make prudent choices.

It seems that in most situations in which a person has to make decisions, the value of life experiences accumulated in his memory remains indisputable. However, it also seems, that when referring to them we should not forget about analogy, not the identity, of these situations.

Dr hab. Tomasz Dutkiewicz, prof UMK
Faculty of Theology, Nicolaus Copernicus University
tomasz.dutkiewicz@op.pl

Buki Fatona

Embodied Constructivism: The Imagination as a Vehicle for Mental Time Travel

In this presentation, I propose an account of episodic memory and episodic future-directed imagination for which I invent the term, ‘embodied constructivism’. Embodied constructivism, I claim, is a more sophisticated, enactivist version of Augustine of Hippo’s constructivist account of memory and expectation on which rest his epistemic claims concerning how God is known and remembered. However, embodied constructivism avoids metaphysical issues facing Augustine’s account by drawing on cutting-edge theories in philosophy of memory, studies in experimental psychology, and recent findings in cognitive neuroscience. Embodied constructivism is a synthesis of two contemporary theories of memory: an embodied theory of memory generation – specifically, autopoietic enactivism – with a constructivist model – specifically, simulationism. As embodied constructivism asserts, mentally travelling to the past to relive it in episodic memory and mentally travelling to the future to pre-live it in future-directed imagination are co-functional processes. In addition to preserving Augustine’s epistemic claims concerning how God is remembered and known, a further upshot of embodied constructivism is that it illustrates the importance of philosophy of science to theology in its reliance on a scientifically rigorous model of memory in defence of epistemological theology.

Dr Buki Fatona

Faculty of Theology and Religion, University of Oxford

bukifatona@icloud.com

Saša Horvat

Isječci postojanja: memorija, sebstvo i fotografija

Ljudsko sebstvo podiže se na temeljima vlastitog iskustva. Memorija je tako vrelo u kojem se ogledamo u potrazi za razumijevanjem vlastitog bića. Pisana riječ obogatila je to vrelo jer je uspjela sačuvati iskustva. No, od kada je čovjek uspio uhvatiti momente svjetla, od izuma fotografije, nastaje jedan novi oblik čuvanja memorije. Fotografija je objektivna, nepromjenjiva, ne laže, i danas je lako dostupan način bilježenja stvarnosti. Za neke mislioce, ljudi su odavno predali stvarnost slikama (uključujući i fotografiju), kao vjernim replikama života koje je lako manipulirati prema vlastitim željama. Predavanje ima za cilj istražiti koja je uloga fotografije u oblikovanju vlastitog identiteta i narativa o samima sebi. U središtu interesa je osobna fotografija – nas, obitelji, prijatelja, detalja s putovanja, dakle, ona svakodnevna, koju često stvaramo slučajno, nehajno, uz pomoć mobitela. Zanima nas zašto nam je toliko privlačno „pisanje svjetlom“, što u biti želimo zabilježiti, za koga i s kojom svrhom.

Izv. prof. dr. sc. Saša Horvat

Medicinski fakultet / Fakultet zdravstvenih studija Sveučilišta u Rijeci

sasa.horvat@uniri.hr

Snapshots of Being: Memory, Self, and Photography

The human self is built upon the foundations of personal experience. Memory, therefore, is a well in which we gaze in search of understanding our own being. The written word has enriched this well by preserving experiences. Yet, ever since humans learned to capture moments of light—the invention of photography—a new form of preserving memory emerged. Photography is objective, unchangeable, and does not lie; today, it is an easily accessible way of recording reality. For some thinkers, humanity long ago surrendered reality to images (including photographs), as faithful replicas of life that can easily be manipulated according to one's desires. This lecture aims to explore the role of photography in shaping personal identity and narratives about ourselves. Its central focus is personal photography—of ourselves, our families, friends, travel details; the everyday images we often create accidentally or carelessly with our phones. We are interested in why “writing with light” is so appealing to us, what we truly wish to capture, for whom, and for what purpose.

Assoc. Prof. Saša Horvat

Faculty of Medicine / Faculty of Health Studies, University of Rijeka

sasa.horvat@medri.uniri.hr

Marcin Kazmierczak

The Obstinate Memory of the Origin: A Reading of the Modern Myth as a Reworking of the Classical Wisdom

This paper analyzes a selection of modern and contemporary literary motifs—such as the Golem, Frankenstein, Don Juan, and the Time Machine—through their relationship with classical mythology. A comparative approach is applied to both the functions and structures of classical myths and to specific ancient narratives whose sapiential and timeless messages persistently echo across centuries into the modern era. The study highlights how these enduring mythological elements are reinterpreted and reimagined in modern literature, suggesting a continuous, though transformed, dialogue between antiquity and contemporary cultural imagination.

Prof. Marcin Kazmierczak

Abat Oliba University in Barcelona, CEU Universities
kazmierczak1@uao.es

Youngjin Kiem

A Husserlian Treatment of Memory and Forgetting and Its Application to the Design of Religious AI: A Prolegomenon

Broadly speaking, religious spirituality consists in the intentional emptying of the secular and the intentional filling with the transcendent. Yet this idea is often regarded as nonsensical, especially within positivist and materialist contexts. Given the backdrop, I attempt to provide a philosophical foundation for this idea by partially refining and applying the notion of memory developed by the phenomenologist Edmund Husserl. As is well known, Husserl conceives memory as consciousness's active re-presentation (presentification/*Vergegenwärtigung*) of past experiences within a temporal horizon of past and present. Here, if memory is considered an active re-presenting act of consciousness, then forgetting—specifically, a certain type of forgetting—may likewise be understood as a deliberate and voluntary act of absenting by consciousness. The idea of active forgetting is not entirely foreign. We recognize that within the philosophy of life and axiology, Friedrich Nietzsche already articulated a version of this idea. Unlike Husserl's and Nietzsche's philosophies, however, the present inquiry connects memory as an active re-presenting act and forgetting as an active absenting act to the religious intentional acts of filling and emptying. From this perspective, I argue that active memory and forgetting thus understood can (i) serve as justifiable means of realizing religious ends and (ii) function as important theoretical principles and design devices for what we call 'strong religious AI.'

Asst. Prof. Youngjin Kiem

Department of Philosophy, Dongguk University—Seoul Campus

phi.kiem@gmail.com

Enrique Martínez

The Rootedness of Intellect and Will in Memory, According to Thomas Aquinas

Knowledge and love, as well as intellect and will, while remaining distinct must be understood in man as being intrinsically related on account of his being ordained to a single ultimate end. This responds to the substantial inclination that every human being has for synthesis, for intimate unity. One of the clearest examples of this spirit of synthesis can be recognised in the teaching of saint Thomas Aquinas, for example, in his attitude of assimilation of the doctrines of many authors, mainly Aristotle and saint Augustine. We will try to show how, in the thought of Aquinas, faithful to his Augustinian heritage, the will and the intellect find their rootedness in the memory of oneself, based on the doctrine of the created good according to mode, species and order. In this the mind is the image of God, to which man is ordered by knowledge and love. Therefore, we can conclude that the memory of oneself is memory of God.

Prof. Enrique Martínez

Abat Oliba University in Barcelona, CEU Universities

emartinez@uao.es

Marko Medved

Pamćenje u odnosu na povijesnu znanost i povijest medicine

Opisat će se razlika između sjećanja i pamćenja, pri čemu se posebno ističe kolektivno ili društveno pamćenje kao organizirano i institucionalizirano čuvanje prošlosti. Autor će analizirati pamćenje unutar povijesti i povijesne znanosti. Pamćenje ima veliku ulogu i u povijesti medicine. No posebnost povijest medicine očituje se onda kada suvremena medicina njeguje spomen isključivo na recentnu prošlost. Povjesničar medicine stoji pred iskušenjem čuvanja spomena isključivo na trenutke diskontinuiteta i promjene, gledajući prema prošlosti samo kako bi se potvrdili aktualni dosezi ili eventualno kako bi se uočio primjer nekog anticipatora.

Prof. dr. sc. Marko Medved

Medicinski fakultet Sveučilišta u Rijeci

marko.medved@uniri.hr

Memory in Relation to Historical Science and the History of Medicine

The distinction between Recollection and Memory will be described, with particular emphasis on collective or social Memory as an organized and institutionalized preservation of the past. The author will analyze memory within history and historical science, where memory plays a major role also in the History of Medicine. However, the specificity of the History of Medicine is evident in cases where

modern Medicine cultivates remembrance only of the recent past. The historian of Medicine faces the temptation of preserving the Memory exclusively of moments of discontinuity and change, looking to the past merely to confirm current achievements or, at most, to identify an example of a possible forerunner.

Prof. dr. sc. Marko Medved

Faculty of Medicine, University of Rijeka

marko.medved@uniri.hr

Amir Muzur

Smisao i sudbina pamćenja u svjetlu progressa umjetne inteligencije

Polazeći od povijesnih situacija koje su utjecale na promjenu shvaćanja i korištenja pamćenja – poput izuma pisma ili uvođenja prijenosnih kalkulatora i, u novije vrijeme, interneta i ChatGPT-a, ovaj se rad bavi razmatranjem uloge pamćenja u prakticiranju raznih vrsta i manifestacija znanja, šaha, u evaluaciji istine i originalnosti. Zaključno, rad se upušta u prognozu razvitka ljudske rase izložene najnovijim kušnjama relativiziranja i omalovažavanja pamćenja uslijed agresivnog progressa umjetne inteligencije.

Prof. dr. sc. Amir Muzur, dr. med.

Medicinski fakultet / Fakultet zdravstvenih studija Sveučilišta u Rijeci

amir.muzur@uniri.hr

The meaning and fate of memory in light of the progress of artificial intelligence

Starting from historical situations that influenced the change in the understanding and use of memory – such as the invention of writing or the introduction of portable calculators and, more recently, the Internet and ChatGPT, this paper deals with the consideration of the role of memory in the practice of various types and manifestations of knowledge, chess, in the evaluation of truth and originality. In conclusion, the paper engages in a prognosis of the development of the human race exposed to the latest temptations of relativizing and belittling memory due to the aggressive progress of artificial intelligence.

Prof. Amir Muzur

Faculty of Medicine, Faculty of Health Studies, University of Rijeka

amir.muzur@uniri.hr

Natalie Nenadic

AI Deepfake Pornography: Attacking the Future Through Attacking Memory

We are in the midst of an explosion of AI deepfake pornography, a crisis whose victims are 99% female. They are mainly teenaged girls, targeted by male classmates, and women in positions of authority such as politicians and celebrities. The aim is to dehumanize, humiliate, and silence them. The targets describe the experience as life-shattering. It creates trauma and terrorizes them into often withdrawing from social and public life, including through suicidal ideation and attempts.

I address this crisis in terms of an attack on positive memories evoked by cherished images of a person's past and present, which are then weaponized to destroy her future. The perpetrator takes any image of his target, often a positive memory digitally preserved on social media, and inserts it into an AI app, which integrates that image-memory into mainstream pornography. Her likeness then becomes someone to whom every imaginable sexual abuse is done. These videos often end up on pornographic websites to which Google algorithms send traffic, producing revenue for both and maintaining a profit motive for creation and proliferation.

I show how AI transforms image-memories into trauma triggers, yielding a crisis of public health and democracy. After introducing what AI deepfake pornography is, I clarify what mainstream pornography overwhelming is, into which AI integrates image-memories. This understanding comes from decades of feminist research. I then show how AI deepfake pornography attacks the target's future. Its repetition and inescapability keep survivors in a condition of re-traumatization, with ongoing health harms. By thus "supplanting" her public identity, her future employment and social connections are also sabotaged, interfering with full exercise of citizenship.

Assoc. Prof. Natalie Nenadic
University of Kentucky, USA
Natalie.nenadic@uky.edu

Sandra Domitrović Spudić

Povezanost moždanog neurotrofnog čimbenika i kognicije u veterana s posttraumatskim stresnim poremećajem

Visoka prevalencija posttraumatskog stresnog poremećaja (PTSP) u Republici Hrvatskoj, uz starenje populacije veterana i sve češća kognitivna oštećenja, predstavlja značajan javnozdravstveni problem. Ključna značajka PTSP-a je oštećenje neurokognitivnih funkcija, ponajviše pažnje, brzine obrade, izvršnih funkcija te verbalnog učenja i pamćenja. Moždani neurotrofni čimbenik (BDNF) ima važnu ulogu u regulaciji neurogeneze, plastičnosti sinapsi i kognitivnih funkcija, a promjene u njegovoj ekspresiji mogu biti povezane s nastankom i težinom PTSP-a. Najveća koncentracija BDNF-a nalazi se u prefrontalnom korteksu, ključnom za kontrolu emocija, kognicije i izvršnih funkcija, čije je funkcioniranje narušeno uslijed stresa i trauma, što dovodi do simptoma karakterističnih za PTSP (nesmotreno ponašanje, gubitak kontrole, sposobnosti održavanja pažnje).

Cilj ovog istraživanja bio je ispitati povezanost koncentracije BDNF-a u plazmi s pojavom PTSP-a i kognitivnih poremećaja u ratnih veterana. U studiju je bilo uključeno 350 muškaraca s PTSP-om i 350 kontrolnih ispitanika, a dijagnoza i kognitivno funkcioniranje procijenjeni su standardiziranim kliničkim i neuropsihološkim testovima (CAPS, MMSE2, MoCA, PANSS). Rezultati su pokazali da veterani s PTSP-om imaju značajno snižene koncentracije BDNF-a u plazmi i izraženije kognitivne smetnje u odnosu na kontrole. Nadalje, broj bodova na kognitivnoj domeni ljestvice PANSS značajno i negativno korelira s koncentracijom BDNF-a u plazmi, što predstavlja prvi takav nalaz u literaturi. Dobiveni rezultati upućuju na potencijal BDNF-a kao dijagnostičkog i prognostičkog biomarkera, osobito u identifikaciji bolesnika s povećanim rizikom za razvoj kognitivnih poremećaja.

Dr. sc. Sandra Domitrović Spudić, dr. med.

Zavod za forenzičku psihijatriju

Referentni centar Ministarstva zdravstva za forenzičku psihijatriju

Klinika za psihijatriju Vrapče

sandra_domitrovic@yahoo.com

Association Between Brain-Derived Neurotrophic Factor and Cognition in Veterans with Posttraumatic Stress Disorder

The high prevalence of posttraumatic stress disorder (PTSD) in the Republic of Croatia, in conjunction with an aging veteran population and the increasing incidence of cognitive impairment, constitutes a major public health concern. A hallmark feature of PTSD involves deficits in neurocognitive functioning, most notably in attention, processing speed, executive functions, as well as verbal learning and memory. Brain-derived neurotrophic factor (BDNF) plays a pivotal role in the regulation of neurogenesis, synaptic plasticity, and cognitive processes. Alterations in its expression have been implicated in the pathophysiology and severity of PTSD. The highest concentrations of BDNF are localized within the prefrontal cortex, a region essential for emotional regulation, cognition, and executive control. Dysregulation of this region under stress and trauma contributes to the characteristic clinical manifestations of PTSD, including impulsivity, impaired self-control, and attentional difficulties.

The objective of the present study was to investigate the association between plasma BDNF concentrations, PTSD, and cognitive impairment in war veterans. A total of 350 male veterans with PTSD and 350 control participants were included. Diagnostic evaluation and assessment of cognitive functioning were conducted using standardized clinical and neuropsychological instruments (CAPS, MMSE-2, MoCA, PANSS). Findings demonstrated that veterans with PTSD exhibited significantly reduced plasma BDNF concentrations and more pronounced cognitive deficits compared with controls. Moreover, scores on the cognitive domain of the PANSS scale showed a significant negative correlation with plasma BDNF concentrations, representing the first such observation reported in the literature.

These results highlight the potential utility of BDNF as a diagnostic and prognostic biomarker, particularly for the early identification of individuals at elevated risk for cognitive decline.

Sandra Domitrović Spudić, PhD, MD

Department of Forensic Psychiatry

Reference Center of the Ministry of Health for Forensic Psychiatry

University Psychiatric Hospital Vrapče

sandra_domitrovic@yahoo.com

Berenika Seryczyńska

Footprints of Memory. The Restorative Role of Pilgrimage as an Experience of Tradition and Values

Pilgrimage, one of the most universal symbols of the human condition, has long been understood as a journey toward the source of meaning and values. Far beyond its physical dimension, the pilgrim's path—exemplified by routes such as the Camino de Santiago—becomes a living space of memory where spirituality, tradition, and community intertwine. From the medieval source of Pope Calixtus II in the *Codex Calixtinus*, who saw memory as a form of spiritual participation, to contemporary interpretations, pilgrimage emerges as an act that not only recalls history but also re-enacts it in the present.

Following Paul Ricoeur, memory is not a passive recollection but an active process of identity formation—a way of recognizing oneself through a past that remains operative in the present. The pilgrim, therefore, “participates by remembering”: the journey itself becomes an act of anamnesis, a living recollection of the sacred that continually reveals new meanings. Similarly, Mircea Eliade's concept of returning to sacred time and Joseph Ratzinger's vision of tradition as the living memory of the Spirit show that pilgrimage allows believers to renew their bond with truth and faith across history. Each step thus echoes the rhythm of the Church's memory, transforming tradition into a dynamic movement of faith through time.

This restorative dimension extends beyond the individual to the communal and cultural spheres. Drawing on Alexis de Tocqueville's metaphor of the “murky waters” of modern culture, pilgrimage appears as a journey toward the “pure waters” of fundamental values—truths that purify, revitalize, and give direction. By stepping outside everyday routines, pilgrims experience a renewal of inner clarity and vitality, while at the same time strengthening the social fabric through dialogue, hospitality, and shared purpose.

Dr. sc. Berenika Seryczyńska
University of Rijeka
berenika.seryczynska@uniri.hr

Bilješke / Notes

[illegible]

[illegible]

Organizing Committee

Organizacijski odbor simpozija

Saša Horvat, predsjednik
Sveučilište u Rijeci
Medicinski fakultet i Fakultet zdravstvenih studija

Amir Muzur
Sveučilište u Rijeci
Medicinski fakultet i Fakultet zdravstvenih studija

Piotr Roszak
Uniwersytet Mikołaja Kopernika w Toruniu
Wydział Teologiczny

Enrique Martínez
Universitat Abat Oliba CEU

Veronika Nela Gašpar
Sveučilište u Zagrebu
Katolički bogoslovni fakultet

Nenad Malović
Sveučilište u Zagrebu
Katolički bogoslovni fakultet

Franjo Mijatović
Sveučilište u Rijeci
Medicinski fakultet

Marko Medved
Sveučilište u Rijeci
Medicinski fakultet

Branko Murić
Sveučilište u Zagrebu
Katolički bogoslovni fakultet

Berenika Seryczyńska
Sveučilište u Rijeci

Scientific Committee

Znanstveni odbor simpozija

Goran Hauser

Sveučilište u Rijeci
Medicinski fakultet

Daniela Malnar

Sveučilište u Rijeci
Fakultet zdravstvenih studija

Dariusz Kotecki

Uniwersytet Mikołaja Kopernika w Toruniu
Wydział Teologiczny

Mario Cifrak

Sveučilište u Zagrebu
Katolički bogoslovni fakultet

Tomasz Huzarek

Uniwersytet Mikołaja Kopernika w Toruniu
Wydział Teologiczny



Sveučilište u Zagrebu - Katolički bogoslovni fakultet



UNIwersYTET
MIKOŁAJA KOPERNIKA
W TORUNIU
Wydział Teologiczny



Na financijskoj potpori koja je omogućila održavanje ovog skupa zahvaljujemo Medicinskom fakultetu i Fakultetu zdravstvenih studija Sveučilišta u Rijeci, Katoličkom bogoslovnom fakultetu Sveučilišta u Zagrebu, Primorsko-goranskoj županiji i John Templeton zakladi.

We are grateful to University of Rijeka, Faculty of Medicine and Faculty of Health Studies – University of Rijeka, Catholic Faculty of Theology University of Zagreb, Primorje-Gorski Kotar County and John Templeton Foundation for their financial support that made this conference possible.



FZSri

FAKULTET ZDRAVSTVENIH STUDIJA
SVEUČILIŠTA U RIJECI

medri

MEDICINSKI FAKULTET SVEUČILIŠTA U RIJECI



Sveučilište u Zagrebu - Katolički bogoslovni fakultet



UNIWERSYTET
MIKOŁAJA KOPERNIKA
W TORUNIU

Wydział Teologiczny



CEU

Universitat

Abat Oliba



9 789538 447082