



# Mihailo Petrović

# ALAS

Life  
Work  
Times



Serbian Academy of Sciences and Arts







SERBIAN ACADEMY OF SCIENCES AND ARTS

MIHAILO PETROVIĆ ALAS: LIFE, WORK, TIMES  
ON THE OCCASION OF THE 150<sup>th</sup> ANNIVERSARY OF HIS BIRTH

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SERBIAN ACADEMY OF SCIENCES AND ARTS

Exclusive editions, such as this monograph, call for the engagement, enthusiasm and cooperation of a number of individuals and institutions. We would like to use this opportunity and extend our gratitude to everyone who has taken part or in any way contributed to, or supported the creation and publication of this monograph.

First of all, we would like to express our gratitude to the authors of papers for their effort taken to provide expert and high level insights into some main points of Mihailo Petrović Alas' life and work, at the same time preserving an important aspect of being easy to read and appealing to a broader readership. In addition, we would like to thank to Ms. Snežana Krstić-Bukarica and Ms. Nevena Đurđević from SASA Publishing Section for performing a thorough proofread of the papers, thus making the writing even more articulate.

The monograph features a number of photographs and the copies of documents that have been obtained owing to the kindness of the SASA Archive, SASA Library, SASA Mathematical Institute, Archive of Serbia, Mr. Viktor Lazić from the "Adligat" Society, Mr. Jovan Hans Ivanović and his "Mihailo Petrović Alas" Foundation, "Mihailo Petrović Alas" Primary School, "Svetozar Marković" University Library, Belgrade City Museum, Zavod za udžbenike (Institute for Textbook Publishing) in Belgrade, Virtual Library of Faculty of Mathematics in Belgrade and Digital Legacy of Mihailo Petrović Alas.

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S. Pilipović, G. Milovanović, Ž. Mijajlović

# CONTENTS

7 | Editor's foreword

## MIHAILO PETROVIĆ ALAS: LIFE AND WORK

- 13 | Žarko Mijajlović, *Mihailo Petrović Alas and His Age*  
35 | Stevan Pilipović, *Academician Mihailo Petrović – His Contributions to Science and Education*  
65 | Gradimir V. Milovanović, Miodrag Mateljević, Miloljub Albijanić, *The Serbian School of Mathematics – from Mihailo Petrović to the Shanghai List*  
93 | Vojislav Andrić, *Pedagogical Work of Mihailo Petrović*

## MIHAILO PETROVIĆ IN PHILOSOPHY, LITERATURE AND PUBLIC LIFE

- 115 | Slobodan Vujošević, *Mathematical Phenomenology and the Philosophy of Mathematics*  
127 | Nikola Petrović Morena, *Mathematical Phenomenology between Myth and Reality*  
143 | Đorđe Vidanović, *Mihailo Petrović Alas and Modern Cognitive Science*  
157 | Mihajlo Pantić, *On Fishing and Literary Works of Mihailo Petrović Alas*  
171 | Milan Božić, *Travels and Travelogues*  
185 | Nenad Teofanov, *Mihailo Petrović's Fishing – One View*

## MIHAILO PETROVIĆ: INVENTIONS AND PATENTS

- 201 | Radomir S. Stanković, *The Hydrintegrator of Mihailo Petrović Alas*  
215 | Katica R. (Stevanović) Hedrih, *Mechanics and Engineering in Mihailo Petrović's Work*  
233 | Miodrag J. Mihaljević, *Mihailo Petrović Alas and the State Cryptography of the Interwar Period*

## MATHEMATICAL LEGACY OF MIHAILO PETROVIĆ, APPENDICES

- 249 | Zoran Ognjanović, *Tadija Pejović and the Logical Branch of Mihailo Petrović Alas' Successors*  
257 | Vladimir Dragović, *Mihailo Petrović, Algebraic Geometry and Differential Equations*

- 267 | Nataša Krejić, *Group for Numerical Mathematics in Novi Sad*  
275 | Dora Seleši, *Mihailo Petrović Alas – Scientific Legacy and Modern Achievements in Probability Theory*

#### MIHAILO PETROVIĆ IN THE MEDIA AND ARCHIVES

- 285 | Maja Novaković, *Digitization of the Legacy of Mihailo Petrović Alas*  
299 | Marija Šegan-Radonjić, *Documents on Mihailo Petrović Alas in the Archives of the Mathematical Institute SASA (1946–1954)*

#### GENEALOGY

- 309 | Boško Jovanović, *Mathematical Genealogy of Mihailo Petrović Alas*  
329 | *Mathematical Genealogical Tree of Mihailo Petrović*, compiled by Žarko Mijajlović  
347 | Remarks

#### MIHAILO PETROVIĆ: SELECTED BIBLIOGRAPHY

- 359 | *Appendices to Bibliography and Sources of Data*, prepared by Žarko Mijajlović and Stevan Pilipović



## EDITOR'S FOREWORD

As soon as one first encounters the work of Mihailo Petrović, it becomes evident that he was a person that according to its numerous traits was a polymath. Above all, the academician Petrović was a gifted mathematician and a renowned professor at the University of Belgrade, but also a fisherman, writer, philosopher, musician, world traveler and a travel writer. He earned a degree in mathematics at the Belgrade Grand School and a licentiate degree in mathematics, physics and chemistry at the Sorbonne. At the age of 26, only a year after he had completed his studies, he defended his PhD degree in mathematics at the same university, as a student of the famous French mathematicians Henri Poincaré, Charles Hermite and Charles Émile Picard. In the same year (1894) he was elected to the position of professor at the Grand School to which he brought the spirit of the French mathematical school. It was at that point that his long and prolific journey through science began, whereas, owing to him, Belgrade achieved parity with other major European centers in mathematical sciences. He became an initiator and a leader of the Serbian mathematics and strongly contributed to the spirit of the modern European science in Serbia.

Petrović's expertise spanned several mathematical areas in which he achieved scientific results of world-class relevance: differential equations, numerical analysis, theory of functions of a complex variable and geometry of polynomials. He was also interested in natural sciences, chemistry, physics and biology, and he published scientific papers in these fields, too. In his scientific endeavor he managed to meet the most rigorous standards of the most developed European countries. In a brilliant rise, in a few years' time, up to the early 20<sup>th</sup> century, he wrote around thirty papers that he published in the leading European mathematical journals. It was due to this fact that he was elected a member of the Serbian Royal Academy as early as at the age of 30, and soon after he became a member of a number of foreign academies and prominent expert societies. He won the greatest respect of the global mathematical community: he was among few mathematicians (13) who delivered at least five plenary lectures or lectures as a visiting lecturer at the International Congress of Mathematicians (ICM). He delivered five such lectures (1908, 1912, 1924, 1928 and 1932). One such invitation has been considered by the mathematical community as an equivalent of an induction to a hall of fame. In addition, it has been considered that Petrović was a founder of new scientific disciplines, namely mathematical phenomenology and spectral theory. He invented several analogue computing machines, possessed technical patents and was the main cryptographer of the Serbian and Yugoslav Army.

Up to the Second World War he was the mentor of all doctoral thesis in mathematics defended at the University of Belgrade. Aforementioned is related to one of professor Petrović's greatest and most important achievements – he was a founder of the Serbian mathematical school that has produced a great number of renowned and successful mathematicians not only in Serbia but also around the world.

In 2018, the Serbian Academy of Sciences and Arts and mathematicians in Serbia celebrate the 150<sup>th</sup> anniversary of the birth of Mihailo Petrović Alas. Throughout this year, the Academy has organized a large exhibition dedicated to Petrović, alongside a solemn gathering and a conference. This monograph commemorates this important jubilee of the Serbian mathematics. Given the fact that a lot of articles on Petrović have already been written, and that his collected works were published at the end of the last century, the editors and authors of the papers in this monograph were faced with a daunting task of finding some new details from professor Petrović's life and career. Even more so given that his body of work is immense, spanning different scientific areas and encompassing topics that at first glance one finds difficult to combine. As Dragan Trifunović, Petrović's biographer and a man who most thoroughly studied his life and work, noted on one occasion that almost an institute was necessary that would encompass professor's entire body of work. Therefore, we set a relatively modest goal to ourselves to shed light upon some main points of Petrović's life and work, times and circumstances he lived in, as well as to elaborate on the present developments in relation to the Serbian mathematical school, through a selection of papers. The authors of the papers steered clear of technical details and excessive use of mathematical language. Hence, the monograph is intended for a broader readership, in particular to those readers who are interested in the history of Serbian science and its evolvement at the turn of the 20<sup>th</sup> century, but also to those who want to gain a deeper insight into the life of a brilliant mathematician and a polymath, and, we can quite freely say, an unusual personality.

Ž. Mijajlović, S. Pilipović, G. Milovanović





MIHAILO PETROVIĆ ALAS:  
LIFE AND WORK



# MATHEMATICAL GENEALOGY OF MIHAILO PETROVIĆ ALAS

Boško JOVANOVIĆ

*University of Belgrade, Faculty of Mathematics*

*We all came out from Gogol's "Overcoat"*

F. M. Dostoyevsky

Mihailo Petrović is deservedly considered the founder of the Belgrade (and Serbian) school of mathematics. Furthermore, the vast majority of today's mathematicians in Serbia have been his successors and followers.

Mihailo Petrović Alas was born on May 6<sup>th</sup>, 1868 in Belgrade, as the first of five children of his father Nikodim, professor at the Faculty of Theology, and his mother Milica (maiden name Lazarević), the daughter of the parish priest Novica Lazarević. He completed the First Belgrade Gymnasium in 1885, and graduated from the Department of Science and Mathematics of the Faculty of Philosophy at the Belgrade Grand School in 1889. After graduation, he left for Paris where he earned diplomas in the area of mathematics (1891) and physics (1893) at the École Normale Supérieure. As the best student in his generation, he attended a reception given by the President of the Republic of France in 1893 and 1894. He defended his doctoral thesis titled "About Zeroes and Poles of Integrals of Algebraic Differential Equations" (Sur les zéros et les infinis des intégrales des équations différentielles algébriques) at Sorbonne (Université Paris IV – Sorbonne), on June 21<sup>st</sup>, 1894, before a committee consisting of Charles



Hermite, Emile Picard and Paul Painleve, and thus he obtained his PhD degree in mathematical sciences (Docteurés sciences mathématiques) [1]. The ambassador (envoy) of the Kingdom of Serbia to France, Milutin Garašanin, also attended the defense of his doctoral thesis. Let us note that Milutin Garašanin was very important person in the public and political life of Serbia at the time: he was Prime Minister, minister of several ministries, envoy to Vienna and Paris, Speaker of the Parliament, founder and president of the Serbian Progressive Party, academician of the Serbian Royal Academy (SRA) and the son of Ilija Garašanin [2].



## MIHAILO PETROVIĆ'S PREDECESSORS

By using the *Mathematics Genealogy Project (MGP)* database of the North Dakota State University [3] that contains data about more than 235,000 defended doctoral dissertations in the field of mathematics, and by following the line doctorand – mentor, it is easy to get the following genealogy of Mihailo Petrović's mathematical predecessors:

Mihailo Petrović (1894)	Johann Bernoulli
Charles Hermite	Jacob Bernoulli
Eugène-Charles Catalan	Nicolas Malebranche
Joseph Liouville	Gottfried Wilhelm Leibniz
Simeon Denis Poisson	Jakob Thomasius
Joseph Louis Lagrange	Friedrich Leibniz (1622)
Leonhard Euler	unknown

This “genealogy” spans over 270 years (from Leibniz the elder to M. Petrović) and contains a sequence of notable French, Swiss and German mathematicians.

The situation changes when, instead of one (first) mentor, we include co-mentors and mentors of several doctorates in the list. Then we get the following:

Mihailo Petrović (1894)  
 Charles Hermite, *Charles Émile Picard*<sup>(1)</sup>  
 Eugène-Charles Catalan  
 Joseph Liouville  
 Simeon Denis Poisson<sup>[a]</sup>, *Louis Jacques Thenard*<sup>(2)</sup>  
 Joseph Louis Lagrange, *Pierre-Simon Laplace*<sup>(3)</sup>  
 Leonhard Euler; *Giovanni Battista (Giambattista) Beccaria*\*  
 Johann Bernoulli  
 Jacob Bernoulli, *Nikolaus Eglinger*<sup>(4)</sup>  
 Nicolas Malebranche; *Peter Werenfels*<sup>(5)</sup>  
 Gottfried Wilhelm Leibniz  
 Jakob Thomasius, *Erhard Weigel*<sup>[b]</sup>; *Bartholomäus Leonhard Schwendendörffer*\*;  
*Christiaan Huygens*<sup>(6)</sup>  
 Friedrich Leibniz\* (1622)

In this list, the co-mentors are separated by a comma, whereas the mentors of different dissertations are separated by a semicolon. For instance, G. W. Leibniz had three doctorates: Dr

Phil. (1666), Dr Jur. (1667) and doctorate published at the Royal Academy of Sciences in Paris (Académie royale des sciences de Paris) (1676). The mentor of his last doctorate was famous physicist Christiaan Huygens.

It is interesting to mention that J. L. Lagrange had never officially defended any doctoral dissertation (there is only a piece of information about B.A. Università di Torino, 1754). Nevertheless, he had provided some fundamental scientific contributions to mathematics and mechanics. On the recommendation of Euler and d'Alembert, Lagrange succeeded Euler as head of the Department of Mathematics of the Prussian Academy of Sciences in Berlin, where he stayed for more than twenty years. Thus, the relation between Euler and Lagrange is tighter in comparison to many official relations between mentors and doctorands [4].

From each co-mentor in the previous list, next to whose name is a number in round brackets, a new “branch” of predecessors starts. Some branches “flow” back into the main tree or to some of the previous branches. Appropriate spots are marked with letters in square brackets. Scientists whose mentor is unknown are marked with a star. As before, the names of co-mentors are italicized, while the name of the originator of each branch is bolded. For some members of the sequence (most often the first and the last member in a respective branch) the year in which they obtained their PhD degree is in the brackets. Thus, we got the following sequence with 30 branches:

<b>Charles Émile Picard</b> <sup>(1)</sup> (1877)	Moritz Valentin Steinmetz
Gaston Darboux	Georg Joachim von Leuchen Rheticus,
Michel Chasles	<i>Johann Hoffmann</i> *
Simeon Denis Poisson <sup>[a]</sup> (1800)	Johannes Volmar, <i>Nicolaus</i>
<b>Louis Jacques Thenard</b> <sup>(2)</sup>	<i>Copernicus</i> <sup>(8)</sup>
Nicolas Louis Vauquelin	Bonifazius Erasmi* (1509)
Antoine Francois de Fourcroy	<b>Pierre-Simon Laplace</b> <sup>(3)</sup> (1769)
Jean Baptiste Michel Bucquet (1768)	Jean Le Rond d'Alembert* (1735)
Pierre Joseph Macquer	<b>Nikolaus Eglinger</b> <sup>(4)</sup> (1660)
Gillaume-Francois Rouelle	Emmanuel Stupanus <sup>[c]</sup> , <i>Johann</i>
Johann Gottlob Spitzley	<i>Caspar Bauhin</i> <sup>(9)</sup>
Nicolas Lemery	Petrus Ryff
Christoph Jacob Glaser	Felix Plater
Johann Christoph Sturm	Guillaume Rondelet
Erhard Weigel <sup>[b]</sup> , <i>Johannes de Raey</i> <sup>(7)</sup>	Johannes Winter von Andernach <sup>[d]</sup>
Philipp Müller	Rutger Rescius; <i>Jacobus Sylvius</i>
Christoph Meurer	<i>(Jacques Dubois)</i> <sup>(10)</sup>

Girolamo Aleandro (Hieronymus Aleander) (1499; 1508)  
 Moses Perez\*, *Scipione Fortiguerra*<sup>(11)</sup>  
**Peter Werenfels**<sup>(5)</sup> (1649)  
 Theodor Zwinger, Jr.  
 Sebastian Beck  
 Johann Jacob Grynaeus  
 Simon Sulzer  
 Wolfgang Fabricius Capito  
 Desiderius Erasmus<sup>[e]</sup>  
 Jan Standonck\* (1474; 1490), *Alexander Hegius*<sup>(12)</sup>  
**Christiaan Huygens**<sup>(6)</sup> (1647; 1655)  
 Frans van Schooten, Jr.; *Jan Jansz Stampioen, Jr.\**  
 Jacobus Golius, Marin Mersenne\*  
 Willebrord Snellius, *Thomas Erpenius*<sup>(13)</sup>  
 Ludolph van Ceulen\*, *Rudolph Snellius (Snel van Royen)*<sup>(14)[f]</sup> (1572)  
**Johannes de Raey**<sup>(7)</sup> (1641)  
 Henricus Regius (Hendrik de Roy), *Adriaan Heereboord*<sup>(15)</sup>  
 Otho Heurnius (Otto van Heurne); *Adriaan van den Spiegel*<sup>(16)</sup>  
 Johannes Heurnius, *Petrus Molinaeus (Pierre du Moulin)\**  
 Petrus Ramus (Pierre de La Ramée)<sup>[g]</sup>; *Hieronymus Fabricius (Girolamo Fabrici d'Acquapendente)*<sup>[h]</sup>  
 Johannes Sturm (Johann Sturm), *Jacques Toussain*<sup>[i]</sup>  
 Nicolas Clénard (Nicolaes Cleynaerts), *Johannes Winter von Andernach*<sup>[d]</sup>  
 Jacobus Latomus (Jacques Masson), *Jan van Campen (Johannes Campensis)*<sup>(17)</sup>  
 Jan Standonck\* (1474; 1490); *Unknown*  
**Nicolaus Copernicus**<sup>(8)</sup> (1499)  
 Leonhard von Dobschütz\*, *Domenico Maria Novara da Ferrara*<sup>(18)</sup> (1483)  
**Johann Caspar Bauhin**<sup>(9)</sup> (1649)  
 Emmanuel Stupanus<sup>[c]</sup> (1613)  
**Jacobus Sylvius (Jacques Dubois)**<sup>(10)</sup> (1530)  
 Jean Tagault\*; *François Dubois\** (1516)  
**Scipione Fortiguerra**<sup>(11)</sup> (1493)  
 Angelo Poliziano  
 Marsilio Ficino, *Cristoforo Landino\**  
 Johannes Argyropoulos<sup>[j]</sup>  
 Basilios Bessarion<sup>[k]</sup>  
 Georgios Plethon Gemistos  
 Demetrios Kydones<sup>[l]</sup>, *Elissaeus Judaeus\**  
 Nilos Kabasilas  
 Gregory Palamas  
 Theodore Metochites  
 Manuel Bryennios  
 Gregory Chioniadis (1296)  
 Shams ad-Din Al-Bukhari  
 Nasir al-Din al-Tusi  
 Kamal al Din Ibn Yunus  
 Sharaf al-Din al-Tusi\*  
**Alexander Hegius**<sup>(12)</sup> (1474)  
 Rudolf Agricola, *Thomas von Kempen à Kempis*<sup>(19)</sup>  
 Theodoros Gazes<sup>[m]</sup>  
 Vittorino da Feltre<sup>[n]</sup>

Guarino da Verona (1408)  
 Manuel Chrysoloras  
 Demetrios Kydones<sup>[l]</sup>  
**Thomas Erpenius**<sup>(13)</sup> (1608)  
 Joseph Justus Scaliger  
 Adrien Turnèbe  
 Jacques Toussain<sup>[i]</sup>  
 Guillaume Budé (1486; 1491)  
 Georgius Hermonymus\*, *Janus Lascaris*<sup>(20)[o]</sup>  
**Rudolph Snellius (Snel van Royen)**<sup>(14)[f]</sup>  
 (1572)  
 Valentine Naibod, *Immanuel Tremellius*<sup>(21)</sup>  
 Erasmus Reinhold<sup>[p]</sup>  
 Jakob Milich  
 Desiderius Erasmus<sup>[el]</sup> (1506); *Ulrich Zasius*\*  
**Adriaan Heereboord**<sup>(15)</sup> (1631)  
 Franck Pieterszoon Burgersdijk  
 Gilbert Jacchaeus  
 Duncan Liddel; *Jacobus Arminius (Jacob Harmensz)*<sup>(22)</sup>  
 John Craig, *Paul Wittich*<sup>(23)</sup>; *Unknown*  
 Theodor Zwinger  
 Petrus Ramus (Pierre de La Ramée)<sup>[gl]</sup> (1536);  
*Bassiano Landi*<sup>(24)</sup>, *Vittore Trincavelli*<sup>(25)</sup>  
**Adriaan van den Spieghel**<sup>(16)</sup> (1603)  
 Hieronymus Fabricius (Girolamo Fabricid' Acquapendente)<sup>[h]</sup>  
 Gabriele Falloppio  
 Antonio Musa Brasavola, *Matteo Realdo Colombo (Renaldo Columbus)*<sup>(26)</sup>  
 Niccolò Leonicens<sup>[q]</sup>

Ognibene Bonisoli da Lonigo  
 (Omnibonus Leonicensus); *Pelope*\*,  
*Pietro Roccabonella*<sup>(27)</sup>  
 Vittorino da Feltre<sup>[n]</sup> (1416)  
**Jan van Campen (Johannes Campensis)**<sup>(17)</sup>  
 (1519)  
 Johann Reuchlin (Johannes Kapnion)<sup>[r]</sup>;  
*Matthaeus Adrianus*\*  
 Johannes Argyropoulos<sup>[j]</sup> (1444); *Jacob ben Jehiel Loans*\*  
**Domenico Maria Novara da Ferrara**<sup>(18)</sup>  
 (1483)  
 Johannes Müller Regiomontanus, *Luca Pacioli*\*  
 Georg von Peuerbach, *Basilios Bessarion*<sup>[k]</sup>  
 Johannes von Gmunden  
 Heinrich von Langenstein (1363; 1375)  
 Nicole Oresme\*; *Unknown*  
**Thomas von Kempen à Kempis**<sup>(19)</sup>  
 Geert Gerardus Magnus Groote\*,  
*Florens Florentius Radwyn Radewyns*\*  
**Janus Lascaris**<sup>(20)[o]</sup> (1472)  
 Basilios Bessarion<sup>[k]</sup> (1436), *Demetrios Chalcocondyles*<sup>(28)</sup>  
**Immanuel Tremellius**<sup>(21)</sup> (1549; 1561)  
 Thomas Cranmer\* (1515; 1526); *Unknown*  
**Jacobus Arminius (Jacob Harmensz)**<sup>(22)</sup>  
 (1582)  
 Rudolph Snellius (Snel van Royen)<sup>(14)[f]</sup>  
 (1572)  
**Paul Wittich**<sup>(23)</sup> (1566)  
 Valentin Thau

Johannes Hommel	<b>Demetrios Chalcocondyles</b> <sup>(28)</sup> (1452)
Erasmus Reinhold <sup>[p]</sup> (1535), <i>Philipp Melanchthon</i> <sup>(29)</sup>	Theodoros Gazes <sup>[m]</sup> (1433)
<b>Bassiano Landi</b> <sup>(24)</sup> (1542)	<b>Philipp Melanchthon</b> <sup>(29)</sup> (1511; 1514)
Giovanni Battista della Monte <sup>[s]</sup> , <i>Vittore Trincavelli</i> <sup>(25)</sup>	Johannes Stöffler* (1476); <i>Johann Reuchlin (Johannes Kapnion)</i> <sup>[r]</sup>
Marco Musuro, <i>Pietro Pomponazzi</i> <sup>[t]</sup> ; <i>Niccolò Leoniceno</i> <sup>[q]</sup>	<b>Gemma Frisius</b> <sup>(30)</sup> (1529)
Janus Lascaris <sup>(20)[o]</sup> (1472)	Petrus Curtius (Pieter de Corte)
<b>Vittore Trincavelli</b> <sup>(25)</sup>	Maarten van Dorp (Martinus Dorpius)
Pietro Pomponazzi <sup>[t]</sup> (1487)	Leo Outers* (1485)
Nicoletto Vernia, <i>Pietro Roccabonella</i> <sup>(27)</sup>	
Gaetano da Thiene <sup>[u]</sup>	
Paolo (Nicoletti) da Venezia*	
<b>Matteo Realdo Colombo (Renaldus Columbus)</b> <sup>(26)</sup> (1544)	
Andreas Vesalius (Andries van Wesel)	
Johannes Winter von Andernach <sup>[d]</sup> (1527; 1532), <i>Gemma Frisius (Jemme Reinerszoon)</i> <sup>(30)</sup> , <i>Giovanni Battista della Monte</i> <sup>[s]</sup>	
<b>Pietro Roccabonella</b> <sup>(27)</sup>	
Gaetano da Thiene <sup>[u]</sup> , <i>Sigismondo Polcastro</i> *	

These “branches” contain around 200 names and by connecting them we get a complex graph showing a “genealogical tree” of the mathematical predecessors of Mihailo Petrović. Let us pay attention to some of them. Among mathematicians we need to mention

**Charles Hermite** (1822–1901), French mathematician who made a significant contribution to the numbers theory, square forms, invariant theory, orthogonal polynomials, elliptic functions and algebra. He proved the transcendence of the number  $e$ . Hermite polynomials, Hermite interpolation, Hermite normal form, Hermitian matrix, Hermitian function, Hermitian operator, etc. were named after him. [5].



Joseph-Louis Lagrange  
(1736–1813)



Leonhard Euler  
(1707–1783)

**Joseph Liouville** (1809–1882), French mathematician; he was dealing with the numbers theory, complex analysis, differential geometry, topology, mathematical physics and astronomy. Sturm–Liouville theory, Liouville’s theorem (in complex analysis), Liouville’s theorem (in theory of Hamiltonian systems), Riemann–Liouville integrals, Liouville numbers, etc. were named after him. [6].

**Simeon Denis Poisson** (1781–1840), French mathematician and physicist; he was dealing with mathematical physics and rational mechanics, especially with Fourier integrals, calculus of variations, probability theory, problems in the field of electrostatics and magnetism. Poisson’s equation, Poisson distribution, Poisson quotient, etc. were named after him. [7].

**Joseph Louis Lagrange** (1736–1813), Italian-French mathematician and astronomer; he made a significant contribution in all fields of analysis and numbers theory, as well as in classical and celestial mechanics. He is regarded as the greatest mathematician of the 18<sup>th</sup> century. Lagrange’s mean value theorem, Lagrange’s theorem (in group theory), Lagrange interpolating polynomial, Lagrangian mechanics (a reformulation of classical mechanics), etc. were named after him. [4].

**Leonhard Euler** (1707–1783), Swiss mathematician and physicist; he lived and worked in Berlin and Sankt Petersburg. He made great discoveries in many fields of mathematics (mathematical analysis, graph theory, etc.). He introduced a number of terms and representations that are used even today. He also made a significant contribution in the fields of mechanics, optics and astronomy. Euler is regarded as one of the most important mathematicians of the 18<sup>th</sup> century, and one of the greatest mathematicians of all time. Euler’s formula, Euler’s theorem, Euler numbers, Euler diagrams, Euler integral, Euler polynomials, etc. were named after him.[8].

**Johann Bernoulli** (1667–1748), Swiss mathematician, the brother of Jakob Bernoulli and the father of Daniel and Nicolaus II Bernoulli. He is known for his contributions to the development of mathematical analysis; after Newton’s death, he was the leader of European mathematicians [9].

**Jakob Bernoulli** (1655–1705), Swiss mathematician. Made important contributions to the theory of infinite series, solved some of the basic problems of calculus of variations and significantly improved probability theory. He gave analytical terms for several curves (e.g. catenary curve, logarithmic and parabolic spiral). He found solutions for several differential equations. Bernoulli equation, Bernoulli distribution, Bernoulli’s formula, Bernoulli polynomials, Bernoulli numbers were named after him[10].

**Gottfried Wilhelm Leibniz** (1646–1716), German philosopher, mathematician, inventor, lawyer, historian, diplomat and political advisor. He made important contributions to optics and mechanics. He is regarded as the Western civilization's last person possessing encyclopedical knowledge. He introduced infinitesimal calculus independently from Newton, as well as a binary numeral system. Newton-Leibniz formula was named after him, as well as several formulas of differential calculus (about differentiating products of two functions, about differentiating integrals with variable limits, etc.), and several theorems (about medians, about convergence of alternating series) etc.[11].



Gottfried Wilhelm Leibniz  
(1646–1716)

**Charles Émile Picard** (1856–1941), one of the leading French mathematicians of his time. He is best known for his two theorems in the area of functions of complex variables, which were named after him. He contributed significantly to the theory of differential equations. He was one of the first mathematicians to use the ideas of algebraic topology [12]. (Branch 1)



**Jean Gaston Darboux** (1842–1917), French mathematician. He is best known for his achievements in mathematical analysis (theory of integration, partial differential equations) and differential geometry. Darboux integral, Darboux sums, Darboux function, several theorems (in topology, real analysis), Christofel-Darboux identity (and formula), Darboux's formula, Euler-Darboux equation, Darboux (or Goursat) problem, etc. were named after him. [13]. (Branch 1)

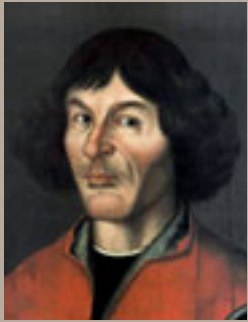
**Pierre-Simon Laplace** (1749–1827), French mathematician and astronomer; he placed the final stone of mathematical astronomy by summing up and expanding works of his predecessors in his five-volume work *Celestial Mechanics* (*Mécanique Céleste*). In this masterpiece, instead of geometrical methods of classical mechanic, Laplace used differential and integral calculus, and thus opened much wider range of problems. In solving the applied problems he developed methods of mathematical physics that are widely used even nowadays. His especially important achievements are related to the potential theory and the theory of special functions. Laplace's equation, Laplace transform, Laplace operator, etc. were named after him. [14]. (Branch 3)

Pierre-Simon Laplace  
(1749–1827)

**Jean Le Rond d'Alembert** (1717–1783), French mathematician, physicist and philosopher. Along with Denis Diderot, he is one of the most famous encyclopedists. He is also known for his mathematical research (differential equations, partial differentiations). A well-known criterion for convergence of series was named after him [15]. (Branch 3)



Christiaan Huygens  
(1629–1695)



Nicolaus Copernicus  
(1473–1543)



Erasmus Roterodamus  
(1466–1536)

Alongside mathematicians, there are many scientists who were dealing with other disciplines among Mihailo Petrović's predecessors. Let us mention some of them.

**Christiaan Huygens** (1629–1695), Dutch mathematician, astronomer and physicist. Historians of science often speak about Huygens as one of the most versatile scientists. He is relatively under-recognized for his role in the development of integral and differential calculus. He claimed that light consists of waves (Huygens principle). He discovered Saturn's moon Titan, was researching Saturn's rings, discovered and described the Orion Nebula, several interstellar nebulas and some binary stars. He wrote the first book on probability theory. His invention of pendulum clock was the turning point in timekeeping [16]. (Branch 6)

**Willebrord Snellius** (Snel van Royen, 1580–1626), Dutch mathematician, physicist and astronomer. He mathematically formulated the law of light refraction. He set out to measure the length of meridian arc in order to determine Earth's circumference. In this, he used the triangulation method [17]. (Branch 6)

**Nicolaus Copernicus** (Mikołaj Kopernik, 1473–1543), Polish astronomer, mathematician, lawyer, physician and economist. He formulated a heliocentric model of celestial motion, which was a revolutionary turning point in astronomy, inspiring major discoveries by Kepler and Newton and changing our understanding of the world [18]. (Branch 8)

**Domenico Maria Novara da Ferrara** (1454–1504), Italian astronomer, mathematician, astrologist, teacher and the friend of Nicolaus Copernicus. Professor of astronomy at the University of Bologna. Among the astronomers of the 15<sup>th</sup> century, he was regarded as a first-class observer. Copernicus used his observations of the Moon for the refutation of Ptolemy's model [19]. (Branch 8)

**Fra Bartolomeo Luca de Pacioli** (1445–1517), Italian mathematician, Franciscan, the associate of Leonardo da Vinci and one of the founders of modern accounting. He is often called "father of accounting", because he was the first to publish detailed description of double-entry bookkeeping system. The most important European algebraist of the 15<sup>th</sup> century [20]. (Branch 18)

**Nicolas Lémery** (1645–1715), French chemist, pharmacist and physician. He was one of the first to develop the chemical theory of acids and alkalis [21]. (Branch 2)

**Desiderius Erasmus** (1466–1536), notable Dutch Augustinian theologian, philosopher, philologist and prolific writer. He was a great thinker at the time of the Renaissance, and was considered the leader of European humanists. His most famous work is *In Praise of Folly* [22]. (Branch 5)



**Joseph Justus Scaliger** (1540–1609), French humanist, philologist, historian and warrior, one of the founders of modern historical chronology, publisher and commentator of ancient manuscripts [23]. (Branch 13)

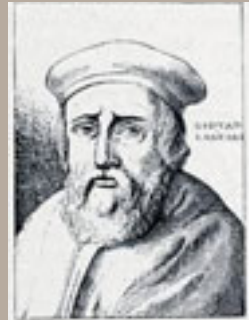
**Gabriele Falloppio** (1523–1562), Italian surgeon, anatomist and botanist. He greatly contributed to what was known about ear and genitals (cochlea, Falloppian tube) [24]. (Branch 16)

**Janus Lascaris** (Ἰανὸς Λάσκαρις, 1445–1535), well-known Greek scientist in the Renaissance period. Came from a noble family. After the fall of Constantinople, he came to Italy via Peloponnese and Crete. He was teaching at universities in Italy, mainly dealing with Greek studies, and was collecting Greek manuscripts. He started working for France and was its ambassador to Venice for a while. He participated in the establishment of libraries in Blois and Fontainebleau. One of his students was Dimitrije Ljubavić (1519–1564), Serbian Orthodox priest, humanist, writer and publisher who established the first formal contact between the Eastern Orthodox church and Lutherans in 1559 [25]. (Branch 13)

**Basilios Bessarion** (Βασίλειος Βησσαρίων, 1403–1472), one of the most known Byzantine humanists in Italy, strongly contributed to the revival of the research of ancient literature, especially Greek one, in the 15<sup>th</sup> century's Western Europe. He was a strong advocate of the union of the Catholic Church and the Orthodox churches, he was Metropolitan bishop of Nicaea, cardinal, Latin patriarch of Constantinople, the candidate for Pope on two occasions. He was looking after the members of the Byzantine imperial family of Palaeologus, participated in negotiations about the marriage of Russian Grand Prince Ivan III Vasilyevich and Sophia Palaeologus [26]. (Branch 11)

**Georgios Plethon Gemistos** (Γεώργιος Πλήθων Γεμιστός, 1355–1452), Byzantine neoplatonic philosopher, professor in Mistras and the advocate of the renewal of Hellenism as a basis for resistance against the Ottoman Empire. He renewed platonic philosophy and gathered students, thus creating a school of ancient philosophy [27]. (Branch 11)

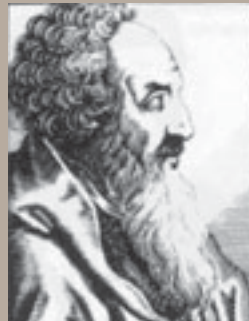
**Demetrios Kydones** (Δημήτριος Κυδώνης, 1324–1398), Byzantine humanistic writer, statesman and theologian, who significantly contributed to the beginning of research of the Greek language, literature and culture within the Italian Renaissance. He translated the most important works of West European writers into Greek, including the works of Aurelius Augustinus and Thomas Aquinas. He advocated the union of the Western and Eastern churches [28]. (Branch 11)



Janus Lascaris  
(1445–1535)



Georgios Gemistos Plethon  
(1355–1452)



Basilios Bessarion  
(1403–1472)



Gregory Palamas  
(1296–1359)

**Gregory Palamas** (Γρηγόριος Παλαμάς, 1296–1359), Byzantine theologian, monk at Athos and Archbishop of Thessaloniki. In Orthodox theology he developed a theory on hesychasm and Divine uncreated energies. A few years after his death, he was canonized by the Orthodox Church [29]. (Branch 11)

**Shams ad-Din Al-Bukhari**, Persian astronomer from the end of the 13<sup>th</sup> century [30]. (Branch 11)

**Nasir al-Din al-Tusi** (نایس و طن ی دلاری صن 1201–1274), Persian polymath, architect, philosopher, physician, scientist and theologian, often regarded as the creator of trigonometry as a mathematical discipline. One of the greatest Persian scientists of the later period [31]. (Branch 11)

**Kamal al Din Ibn Yunus** (1156–1241), prominent Persian mathematician and jurist, head of the well-known observatory in Mosul [32]. (Branch 11)

**Sharaf al-Din al-Tusi** (شیراز و ترفظمن بدم حمن برفظمن ی دل افرش 1135–1213), Persian mathematician and astronomer, worked during the so-called Islamic Golden Age. He was born in the town of Tus, after which he was named. He taught ephemerides and astrology in Aleppo and Mosul [33], (Branch 11). According to the MGP data, Sharaf al-Din al-Tusi has more than 154,000 successors.

It is from this short overview that one can note that in the mathematical genealogy of Mihailo Petrović there are representatives from many countries and nations, who were dealing with various disciplines – there are no state or national borders, nor borders between various scientific disciplines. *Gens una sumus!*

## STUDENTS AND SUCCESSORS OF MIHAILO PETROVIĆ

According to MGP data and data from the Faculty of Mathematics of the University of Belgrade (BU), 11 doctoral dissertations were defended under the mentorship of Mihailo Petrović, all of them at the University of Belgrade, and there are 903 “successors” of Mihailo Petrović in total at the moment. We are providing the list of Mihailo Petrović’s doctorands. Numbers next to their names mark the year in which the dissertation was defended and the number of successors.

Mladen Berić	1912.	Dragoslav Mitrinović	1933, 121
Sima Marković	1913.	Danilo Mihnjević	1934.
Tadija Pejović	1923, 195	Konstantin Orlov	1934, 84
Radivoj Kašanin	1924, 16	Petar Muzen	1937.
Jovan Karamata	1926, 481	Dragoljub Marković	1938, 1
Miloš Radojčić	1928.		

Let us take a closer look at Mihailo Petrović’s students and successors.

**Mladen Berić (1885–1935).** Associate professor (“extraordinary professor”) at the BU in 1919. He was head of the General State Statistics. In 1921 he left the University, and was not dealing with mathematics anymore[34].

**Sima Marković (1888–1939).** He graduated and got his PhD degree under Mihailo Petrović’s mentorship. Professor at the Second Belgrade Gymnasium, Assistant professor (“Docent”) at the BU. Secretary of the Communist Party of Yugoslavia (CPY), a member of parliament and head of the Parliamentary group of CPY, a member of the Executive Committee of Comintern. He was killed in Stalin’s purges, and was rehabilitated in 1958[35].

**Tadija Pejović (1892–1982).** Full professor (“Ordinary professor”) at the BU, Dean of the Faculty of Science and Mathematics, the first president of the Society of Mathematicians and Physicists of Serbia, an author of several university textbooks. He was mainly dealing with the theory of differential equations. He was one of the 1300 Corporals in World War I. When World War II broke out, he was mobilized as a reserve Lt. Colonel, was captured and remained in captivity for the rest of the war. He was the president of the Association of 1300 Corporals [36,37]. He mentored 17 doctorands:

Vojin Dajović	1956, 25	Zagorka Sakl-Šnajder	1960, 1
Dobrivoje Mihajlović	1956.	Milorad Bertolino	1961, 3
Rastko Stojanović	1956, 1	Blažo Okiljević	1962.
Ernest Stipanić	1957.	Nedeljko Parezanović	1962, 10



Sima Marković  
(1888–1935)



Tadija Pejović  
(1892–1982)

Slaviša Prešić	1963, 94	Rade Dacić	1965.
Zoran Ivković	1964, 36	Milica Dajović	1965.
Milosav Marjanović	1964, 12	Borivoje Mihajlović	1965.
Zoran Popstojanović	1964.	Časlav Đaja	1967.
Petar Todorović	1964.		

Total number of his successors at this point is 194. Among them are academicians Milosav Marjanović (SASA), Vojin Dajović (MASA), Miodrag Mateljević (SASA), professors Milorad Bertolino, Nedeljko Parezanović, Slaviša Prešić, Zoran Ivković, Svetozar Milić, Jovan Mališić, Žarko Mijajlović, Miroljub Jevtić, Milutin Obradović, Pavle Mladenović, Rade Živaljević, Miodrag Živković and others.

**Radivoj Kašanin (1892–1989).** Full professor at the BU, SASA academician, rector of the Great Technical School, one of the founders of the Mathematical Institute of the SASA and its head. He was dealing with mathematical analysis (function theory, differential equations), mechanics, astronomy and geo-physics. In World War I, as a volunteer in the Serbian army, he took part in fights in Dobruja, Bessarabia and on the Macedonian front [38].

He mentored two doctorands (Tatomir Anđelić, 1946,14 and Radmilo Đorđević, 1963). The list of his successors includes academician Tatomir Anđelić, professors Đorđe Mušicki, Marko Leko, Ilija Lukačević, Milan Plavšić, etc.

**Jovan Karamata (1903–1967).** One of the greatest Serbian mathematicians of the 20<sup>th</sup> century. Full professor at the BU, a corresponding member of the Serbian Royal Academy, an academician of the SASA. He was invited to move to the University of Geneva in 1950, where he stayed till his death. He is the founder of the school of theory of real functions. He is the author of the theory of regularly varying functions [39,40]. He mentored 12 doctorands:

Vojislav Avakumović	1939, 294	Šefkija Raljević	1955.
Miodrag Tomić	1950.	Bogdan Bajšanski	1956, 12
Slobodan Aljančić	1953, 32	Milenko Steković	1956.
Ranko Bojanić	1953, 17	Monique Vuilleumier	1965.
Vladeta Vučković	1953, 1	H. Baumann	1965.
Bogoljub Stanković	1954, 95	Ronald Coifman	1965, 115

Total number of his successors at this point is 481. Among them are academicians Vojislav Avakumović, Miodrag Tomić, Slobodan Aljančić, Bogoljub Stanković, Olga Hadžić, Stevan Pilipović (SASA), Manojlo Maravić, Mirjana Vuković (ASA of



Radivoj Kašanin  
(1892–1989)

Bosnia and Herzegovina), Endre Pap (ASA of Vojvodina), professors Ronald Coifman, Ranko Bojanić, Bogdan Bajšanski, Dušan Adamović, Dragoslav Herceg, Mila Mršević, Arpad Takacs, Ljiljana Cvetković, Nataša Krejić and others.

**Miloš Radojčić (1903–1975).** Full professor at the BU until 1959, after that he worked at the University of Khartoum (Sudan) and in the National Centre for Scientific Research in Paris. A corresponding member of the SASA. He was one of the most important Serbian mathematicians and one of the greatest intellectuals of the first half of the 20<sup>th</sup> century. He introduced synthetic and descriptive geometry into university curriculum. He wrote two high-ranking textbooks. In his scientific work, he was dealing with the theory of complex analytic functions and the theory of relativity [41].

**Dragoslav Mitrinović (1908–1995).** Full professor at the University of Skopje and at the BU, academician of the Macedonian Academy of Sciences and Arts. In his scientific work, he was dealing with inequalities, functional inequalities, number theory, special functions, differential equations and complex analysis. He published a huge number of university textbooks, books and scientific papers (430 bibliographical units) [42,43]. He mentored 33 doctorands:

Blagoj Popov	1952.	Živko Madevski	1973.
Ivan Bandić	1958.	Ivan Lacković	1975, 2
Lazar Karadžić	1958.	Dušan Slavić	1975.
Dragomir Đoković	1963, 10	Ljubomir Stanković	1975.
Kovina Milošević-Rakočević	1963.	Budimir Zarić	1975.
Danica Perčinkova	1963.	Gradimir Milovanović	1976, 32
Petar Vasić	1963, 29	Žarko Mitrović	1976.
Ilija Šapkarev	1964.	Ismet Dehiri	1977.
Velimir Penavin	1965.	Petar Lazov	1977.
Radosav Đorđević	1966.	Lazar Đorđević	1978.
Dragan Dimitrovski	1968.	Miomir Stanković	1979.
Radovan Janić	1968.	Nikola Azanjac	1980.
Savo Jovanović	1968.	Igor Milovanović	1980, 1
Jovan Kečkić	1970.	Miodrag Petković	1980, 3
Dragoš Cvetković	1971, 11	Vlajko Kocić	1981.
Ionel Stamate	1971.	Behdžet Mesihović	1987.
Živko Tošić	1971.		



Miloš Radojčić  
(1903–1975)

Total number of his successors at this point is 121. Among them are academicians Dragoš Cvetković, Gradimir Milovanović, Ivan Gutman (SASA), Blagoj Popov (MASA), and Josip Pečarić (CASA), professors Dragomir Đoković, Petar Vasić, Dragan Dimitrovski, Jovan Kečkić, Slobodan Simić, Miodrag Petković, Dragan Stevanović and others.

**Danilo Mihnjević.** There is no much information about Danilo Mihnjević. He moved to Yugoslavia (i.e. the Kingdom of Serbs, Croats and Slovenians) as a refugee from Russia after 1917. He pursued his career as a professor in gymnasiums in Kragujevac and Zrenjanin (until 1953) [44,45].

**Konstantin Orlov (1907–1985).** Full professor at the BU. A refugee from Russia, just like D. Mihnjević. After obtaining his PhD degree, he worked for a long time in the Fifth and the Third Boys Gymnasiums in Belgrade, and in 1947 he was elected a teaching assistant at the Faculty of Philosophy of the BU. That same year he moved to the newly-founded Faculty of Science and Mathematics, where he stayed until his retirement, advancing through all the academic ranks. He was teaching several courses, mainly in numerical and applied mathematics. As an UNESCO expert and invited lecturer he visited several foreign universities [46]. He mentored nine doctorands:

Petar Madić	1965.	Boško Jovanović	1976, 67
Momčilo Uščumlić	1965.	Arif Zolić	1977.
Mihail Arsenović	1972.	Ljubomir Protić	1978, 8
Miroslava Stojanović	1973.	Branko Savić	1978.
Max Wotulo	1973.		

Total number of his successors at this point is 84. Among them are Endre Süli, professor at the University of Oxford, a foreign member of the SASA and a member of the European Academy of Sciences (EurASc), professor Boško Jovanović and others.

**Petar Muzen.** There is no much information about Petar Muzen. He was an associate of the Astronomical Observatory in Belgrade [47].

**Dragoljub Marković (1903–1965).** Full professor at the BU. The main field of his scientific work was algebra, especially problems related to the limits of roots in algebraic equations, calculating roots, i.e. factorization [48]. He mentored one doctorand (Jovan Petrić, 1960).

## INDIRECT RELATIONS

**Đuro Kurepa (1907–1993).** Full professor at the University of Zagreb (1946–65) and at the BU (1965–77), corresponding member of the YASA, academician of the ASA of Bosnia and Herzegovina and of the SASA. He went for specialization in Paris, Warsaw and Princeton, and spent some time as a guest professor at the University of Colorado Boulder (the USA). He was the president of the Society of Mathematicians and Physicists of Croatia, president of the Association of Societies of Mathematicians and Physicists of Yugoslavia, vice president of the International Commission on Mathematical Instruction, president of the Yugoslav National Committee for Mathematics, president of the Balkan Mathematical Union, president of the Commission for Scientific Work of the Association of Mathematicians, Physicists and Astronomers of Yugoslavia. He was dealing with the set theory, algebra and number theory, general topology, etc. In the set theory, he contributed to the theory of trees, so terms such as Kurepa tree, Kurepa hypothesis, Kurepa continuum, etc. are used even today. He introduced the operation of the left factorial in mathematics [49,50].

Đuro Kurepa defended his doctoral dissertation “Ordered and Ramified Sets” (Ensembles ordonné set ramifiés) in 1935 at Sorbonne. His mentor was René Maurice Fréchet, and Fréchet’s mentor was Jacques Salomon Hadamard, while Hadamard’s (co)-mentors were Charles Émile Picard and Jules Tannery. And since Charles Émile Picard was the second mentor of Mihailo Petrović, we can conclude that Mihailo Petrović is a “mathematical great-uncle” of Đuro Kurepa.

Đuro Kurepa mentored 27 doctorands, and total number of his successors at this point is 162. Among them are academicians Aleksandar Ivić, Stevo Todorčević (SASA), Vladimir Rakočević (a corresponding member of SASA), Veselin Perić (ASA of Bosnia and Herzegovina, ASA of the Republic of Srpska, a honorary member of MASA), professors Stevan Stojanović, Ljubomir Ćirić, Pavle Miličić, Branislav Mirković, Ratko Tošić, Ljubiša Kočinac, Đorđe Dugošija, Aleksandar Lipkovski, Stojan Radenović, Zoran Kadelburg, Miroslav Pavlović, Milutin Dostanić and others.



Đuro Kurepa  
(1907–1993)

## REFERENCES

- [1] [https://sr.wikipedia.org/sr-el/Михаило\\_Петровић\\_Алас](https://sr.wikipedia.org/sr-el/Михаило_Петровић_Алас)<sup>190</sup>
- [2] [https://sr.wikipedia.org/sr-el/Милутин\\_Гарашанин\\_\(политичар\)](https://sr.wikipedia.org/sr-el/Милутин_Гарашанин_(политичар))
- [3] <https://www.genealogy.math.ndsu.nodak.edu/id.php?id=53473>
- [4] [https://en.wikipedia.org/wiki/Joseph-Louis\\_Lagrange](https://en.wikipedia.org/wiki/Joseph-Louis_Lagrange)
- [5] [https://en.wikipedia.org/wiki/Charles\\_Hermite](https://en.wikipedia.org/wiki/Charles_Hermite)
- [6] [https://en.wikipedia.org/wiki/Joseph\\_Liouville](https://en.wikipedia.org/wiki/Joseph_Liouville)
- [7] [https://en.wikipedia.org/wiki/Siméon\\_Denis\\_Poisson](https://en.wikipedia.org/wiki/Siméon_Denis_Poisson)
- [8] [https://en.wikipedia.org/wiki/Leonhard\\_Euler](https://en.wikipedia.org/wiki/Leonhard_Euler)
- [9] [https://en.wikipedia.org/wiki/Johann\\_Bernoulli](https://en.wikipedia.org/wiki/Johann_Bernoulli)
- [10] [https://en.wikipedia.org/wiki/Jacob\\_Bernoulli](https://en.wikipedia.org/wiki/Jacob_Bernoulli)
- [11] [https://en.wikipedia.org/wiki/Gottfried\\_Wilhelm\\_Leibniz](https://en.wikipedia.org/wiki/Gottfried_Wilhelm_Leibniz)
- [12] [https://en.wikipedia.org/wiki/Émile\\_Picard](https://en.wikipedia.org/wiki/Émile_Picard)
- [13] [https://en.wikipedia.org/wiki/Jean\\_Gaston\\_Darboux](https://en.wikipedia.org/wiki/Jean_Gaston_Darboux)
- [14] [https://en.wikipedia.org/wiki/Pierre-Simon\\_Laplace](https://en.wikipedia.org/wiki/Pierre-Simon_Laplace)
- [15] [https://en.wikipedia.org/wiki/Jean\\_le\\_Rond\\_d'Alembert](https://en.wikipedia.org/wiki/Jean_le_Rond_d'Alembert)
- [16] [https://en.wikipedia.org/wiki/Christiaan\\_Huygens](https://en.wikipedia.org/wiki/Christiaan_Huygens)
- [17] [https://en.wikipedia.org/wiki/Willebrord\\_Snellius](https://en.wikipedia.org/wiki/Willebrord_Snellius)
- [18] [https://en.wikipedia.org/wiki/Nicolaus\\_Copernicus](https://en.wikipedia.org/wiki/Nicolaus_Copernicus)
- [19] [https://en.wikipedia.org/wiki/Domenico\\_Maria\\_Novara\\_da\\_Ferrara](https://en.wikipedia.org/wiki/Domenico_Maria_Novara_da_Ferrara)
- [20] [https://en.wikipedia.org/wiki/Luca\\_Pacioli](https://en.wikipedia.org/wiki/Luca_Pacioli)
- [21] [https://en.wikipedia.org/wiki/Nicolas\\_Lemery](https://en.wikipedia.org/wiki/Nicolas_Lemery)
- [22] <https://en.wikipedia.org/wiki/Erasmus>
- [23] [https://en.wikipedia.org/wiki/Joseph\\_Justus\\_Scaliger](https://en.wikipedia.org/wiki/Joseph_Justus_Scaliger)
- [24] [https://en.wikipedia.org/wiki/Gabriele\\_Faloppio](https://en.wikipedia.org/wiki/Gabriele_Faloppio)
- [25] [https://en.wikipedia.org/wiki/Janus\\_Lascaris](https://en.wikipedia.org/wiki/Janus_Lascaris)
- [26] [https://en.wikipedia.org/wiki/Basilios\\_Bessarion](https://en.wikipedia.org/wiki/Basilios_Bessarion)
- [27] [https://en.wikipedia.org/wiki/Gemistus\\_Pletho](https://en.wikipedia.org/wiki/Gemistus_Pletho)
- [28] [https://en.wikipedia.org/wiki/Demetrios\\_Kydones](https://en.wikipedia.org/wiki/Demetrios_Kydones)
- [29] [https://en.wikipedia.org/wiki/Gregory\\_Palamas](https://en.wikipedia.org/wiki/Gregory_Palamas)
- [30] R. Mercier: Shams al-Dīn al-Bukhārī, In: Thomas Hockey et al. (eds.). *The Biographical Encyclopedia of Astronomers*, Springer Reference. New York: Springer, 2007, pp. 1047–1048.
- [31] [http://www-history.mcs.st-andrews.ac.uk/Biographies/Al-Tusi\\_Nasir.html](http://www-history.mcs.st-andrews.ac.uk/Biographies/Al-Tusi_Nasir.html)
- [32] <https://adonis49.wordpress.com/tag/kamal-al-din-ibn-yunus/>
- [33] [http://www-history.mcs.st-andrews.ac.uk/Biographies/Al-Tusi\\_Sharaf.html](http://www-history.mcs.st-andrews.ac.uk/Biographies/Al-Tusi_Sharaf.html)
- [34] E. Stipanić: Mladen Berić (1885–1935). U: *Spomenica 130 godina Matematičkog fakulteta* ([http://www.math.rs/files/Mladen\\_Beric.pdf](http://www.math.rs/files/Mladen_Beric.pdf)).
- [35] [https://sr.wikipedia.org/wiki/Сима\\_Марковић](https://sr.wikipedia.org/wiki/Сима_Марковић)
- [36] Lj. Protić: Tadija Pejović. U: *Spomenica 125 godina Matematičkog fakulteta*, Beograd 1998 (<http://www.matf.bg.ac.rs/files/PejovicT.pdf>).
- [37] [https://sr.wikipedia.org/sr-el/Тадија\\_Пејовић](https://sr.wikipedia.org/sr-el/Тадија_Пејовић)
- [38] [https://sr.wikipedia.org/sr-el/Радивој\\_Кашанин](https://sr.wikipedia.org/sr-el/Радивој_Кашанин)



- [39] A. Nikolić: Jovan Karamata. U: Spomenica 130 godina Matematičkog fakulteta, Beograd 2003 ([http://www.math.rs/files/Jovan\\_Karamata.pdf](http://www.math.rs/files/Jovan_Karamata.pdf)).
- [40] [https://en.wikipedia.org/wiki/Jovan\\_Karamata](https://en.wikipedia.org/wiki/Jovan_Karamata)
- [41] R. Dacić, M. Mateljević: Miloš Radojčić (<http://www.mi.sanu.ac.rs/History/radojcic.htm>)
- [42] G. V. Milovanović: Dragoslav S. Mitrinović (1908–1995), U: Život i delo srpskih naučnika, Biografije i bibliografije, 6 (M. Sarić, ed.), SANU, Beograd, 2000, 519–581.
- [43] [https://sr.wikipedia.org/wiki/Драгослав\\_Митриновић](https://sr.wikipedia.org/wiki/Драгослав_Митриновић)
- [44] Радојка Марковић, Лично саопштење, око 1980.
- [45] [http://www.zrenjaninskagimnazija.edu.rs/?page\\_id=23](http://www.zrenjaninskagimnazija.edu.rs/?page_id=23)
- [46] A. Zolić: Konstantin Pavlovič Orlov. U: Spomenica 125 godina Matematičkog fakulteta, Beograd 1998 (<http://www.matf.bg.ac.rs/files/KonstantinOrlov.pdf>).
- [47] J. Milogradov-Turin: Department of Astronomy of the University of Belgrade, Publ. Astron. Obs. Belgrade, No. 75 (2003), 289–292.
- [48] S. Prešić: Dragoljub Marković. U: Spomenica 130 godina Matematičkog fakulteta, Beograd 2003 ([http://www.math.rs/files/Markovic\\_Dragoljub.pdf](http://www.math.rs/files/Markovic_Dragoljub.pdf)).
- [49] Ž. Mijajlović: Đuro Kurepa. U: Spomenica 130 godina Matematičkog fakulteta, Beograd 2003 ([http://www.math.rs/files/Djuro\\_Kurepa.pdf](http://www.math.rs/files/Djuro_Kurepa.pdf)).
- [50] [https://en.wikipedia.org/wiki/Đuro\\_Kurepa](https://en.wikipedia.org/wiki/Đuro_Kurepa)

