Dickstein Forum 2021

Book of abstracts

POLSKA AKADEMIA UMIEJĘTNOŚCI

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Cracow, Poland

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Foreword

Welcome on the Dickstein Forum 2021. A letter from the Program and Organizing Committee

It is a great pleasure to welcome you all to the Dickstein Forum 2021.

The present conference will be actually the 5th edition of bi-annual conferences organized in Cracow since 2013 on the history of mathematics and related sciences in Central-Eastern Europe. On the initiative of Prof. S. Demidov, President of the International Academy of the History of Sciences, since 2019 the conference have beard the name Dickstein Forum.

This year we have prepared a special session devoted to the history of applied mathematics. It is an initiative of the Wrocław mathematical community.

For sure, the Dickstein Forum will be different this year. Despite this new format we are sure that the conference will be a success.

We wish you all a very productive conference.

Stanisław Domoradzki
chairman

Marek Skarupski
secretary

About Dickstein Forum

Here you can find some basic information about Dickstein Forum

Samuel Dickstein

Samuel Dickstein (1851-1939) was a polish mathematician and historian of mathematics. Born and educated in Warsaw, where he spent all his life. He was a founder or co-founder of scientific journals, including his own "Wiadomości Matematyczne" (Mathematical News), a charter member and vice-president of the Warsaw Scientific Society, a charter member of the Society of Scientific Courses (Courses were a substitute for a non-existing Polish university), a representative of Polish mathematics in all International Congresses of Mathematicians prior to WWI. Dickstein was also a vice-president of the International Academy of the History of Sciences. He has published many textbooks for secondary schools and collected materials for the history of science. His scientific research was connected to number theory, vector algebra, set theory, and the history of mathematics.

Organizers

- Commission on the History of Science, Polish Academy of Arts and Sciences
- International Academy of the History of Science

Cooperating institutions

- Faculty of Mechanics and Mathematics of the Ivan Franko National University of Lvov (Ukraine)
- Institute of History of University of Rzeszów (Poland)
- Institute of Mathematics, Faculty of Transportation Sciences, Czech Technical University in Prague (Czech Republic)
- The Ludwik and Aleksander Birkenmajer Institute for the History of Science of Polish Academy of Sciences, Warsaw (Poland)
- Polish Mathematical Society - Cracow (Poland).

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On-line attendance

 Join Zoom Meeting

Talks will be held via **Zoom**. There is possibility to download Zoom app on your mobile. Please do not share the link to the meetings to non-participants of the conference. In case you will lost your link please contact the organizers.

Make sure to **log-in** 5-10 minutes before starting the session. If you are a presenter, log in about 15 minutes earlier and check with the session chairman if there are any problems with the presentation and connection.

Every-time we are ready to help you and answer questions. Do not hesitate to contact us via e-mail.

Timetable

Tuesday, 14 of September

Chairing the session: Marta Kornafel, president of Kraków Branch of Polish Mathematical Society, Cracow University of Economics

9:45–10:00	**Registration & login time**		
Welcome session.			
10:00–10:20		**Roman Duda** **Michał Kokowski** **Sergei S. Demidov**	Welcome remarks
Session 1			
10:20–11:00		**Sergei S. Demidov** Moscow, Russia	The Polish trace in the creative biography of P.L. Chebyshev (to the 200th anniversary of his birth)
11:05–11:45		**Christine Phili** Athenes, Greece	Pafnutii Lvovich Tchebychev and Cyparissos Stephanos
11:50–12:30		**Roman Duda** Wrocław, Poland	Set theory as a path to the greatness of the Polish Mathematical School
12:35–13:15		**Jan Woleński** Rzeszów, Poland	Philosophy of Mathematics and Mathematical Practice. The Case of Polish Mathematical School
13:20–14:00		**Galina I. Sinkevich** St. Petersburg, Russia	Mathematical problems inspired by St. Petersburg
14:00–14:30	**Coffee & Discussion**		

Wednesday, 15 of September

Chairing the session: Agnieszka Rutkowska, Kraków Branch of Polish Mathematical Society, University of Agriculture in Krakow

9:45–10:00	**Login time**		
Session 2			
10:00–10:40		**Andrij Rovenchak** **Olha Rovenchak** Lviv, Ukraine	Juda Kreisler: A biographical sketch of a Lviv physicist and a popularizer of science
10:45–11:25		**Oleh Petruk** Lviv, Ukraine	Astronomy in Lviv University during XIX century
11:30–12:10		**Olena Hryniv** **Yaroslav Prytula** Lviv, Ukraine	Henri Lebesgue's visit to Poland in 1938
12:15–12:55		**Stanisław Domoradzki** **Mykhaylo Zarichnyi** Rzeszów, Poland Lviv, Ukraine	The relevance of selected problems in topology and functional analysis from the Scottish Book
13:00–13:30		**Oleh Petruk** Lviv, Ukraine	Leopolis Scientifica. A book about history of exact science in Lviv
13:35–14:00		**Michał Kokowski** Warsaw - Cracow, Poland	Ladislas Natanson and Alfred Landé versus Planck's law, the Boltzmann-Planck-Natanson statistics and the Bose statistics
14:00–14:30	**Coffee & Discussion**		

Thursday, 16 of September

Chairing the session: Marek Skarupski, Wrocław University of Science and Technology

9:45–10:00	**Login time**		
Session 3			
10:00-10:40		**Paweł Polak** Cracow, Poland	Samuel Dickstein and Philosophy
10:45–11:25		**Erika Luciano** Turin, Italy	Dickstein and the Italians: Mathematics and Cosmopolitan Ideals between the Belle Époque and the Holocaust
11:30–12:10		**Roman Murawski** Poznań, Poland	Logic at the University in Poznań
12:15–12:55		**Jan Koroński** Cracow, Poland	Polish mathematicians and astronomers of the second half of the 19th century
13:00–13:40		**Marta Kosek** **Margaret Stawiska-Friedland** Cracow, Poland Ann Arbor, USA	Annales de la Societe Polonaise Mathematique : the first journal of the Polish Mathematical Society
13:45–14:25		**Wiesław Wójcik** Częstochowa, Poland	Mazurkiewicz vs. Janiszewski - two different mathematics development projects (in Poland)
14:25–14:55	**Coffee & Discussion**		
Special Session: History of Applied Mathematics			
15:00–15:40		**Władysław Szczotka** Wrocław, Poland	Steinhaus Seminar of Applied Mathematics
15:45–16:25		**Krzysztof Szajowski** Wrocław, Poland	Applications of Mathematics with Stanisław Trybuła
16:30–17:00		**Marek Skarupski** Wrocław, Poland	MODCLIM project: goals, implementation and achieved results of international cooperation
17:00–17:30	**Coffee & Discussion**		

Friday, 17 of September

Chairing the session: Maja Wenderlich, The Maria Grzegorzewska University, Warsaw

9:45–10:00	**Login time**		
Session 4			
10:00–10:40		**Jindřich Bečvář** **Martina Bečvářová** Prague, Czech Republic	200 Years of the Czech Textbook of Geometry by Josef Vojtěch Sedláček
10:45–11:25		**Roman Sznajder** Bowie, USA	The prominence of Gdańsk Academic Gymnasium as a cornerstone of the intellectual activities in Gdańsk
11:30–12:10		**Maja Wenderlich** Warsaw, Poland	Introducing children to the world of geometry. Advantages of shaping intuition and outlines of concepts
12:15–12:55		**Małgorzata Makiewicz** **Konrad Michalak** Warsaw-Łódź, Poland	Popularisation of mathematical knowledge through photography, on the example of the International Competition Mathematics in Focus
Poster session			
13:00–13:15		**Egor M. Bogatov** **Artyom V. Korenev** **Ilya S. Mikhailov** Gubkin - Stary Oskol, Russia	About designing a system of scientific awareness in the history of mathematics field
13:15–13:30		**Renata Celarek** **Mariusz Krempa** Mielec, Poland	Popularization of knowledge among adults. The meaning of visual communication
13:30–13:45		**Juozas Banionis** Kaunas, Lithuania	Research of Lithuanian mathematics at the beginning of the 20th century: mathematical works of Prelate Alexander Jakštas-Dambrauskas
13:45–14:15	**Coffee & Discussion**		
Closing Session			
14:15–14:45		**Roman Duda**	Concluding remarks & greetings

Abstracts – Talks & Posters

The Polish trace in the creative biography of P.L. Chebyshev (to the 200th anniversary of his birth)

Sergey S. Demidov[1]*

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Pafnutii Lvovich Tchebychev and Cyparissos Stephanos

Christine Phili[1]*

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Pafnutii Lvovich Tchebychev (1821-1894) was a frequent visitor of the West. As he spoke fluently French and was a close friend with Hermite and Liouville frequently visited Paris (1852, 1856, 1864, 1873, 1875, 1878, 1882, 1884, 1893). Sophus Lie in his letter to Felix Klein in 1882 reported that during his visit at the Parisian Academy of Sciences he had also spoken with Tchebychev "a marvelous old gentleman, who vital as a youth , had spoken about a number of things he had published , from subjects that had now published , from Abel's surviving papers , to differential equations in which the multiplier could be established when one knew an infinitesimal transformation".

However, in this same year the famous Russian mathematician in August attended a conference of A.F.A.S. (Association Française pour l' Avancement des Sciences) in the town of La Rochelle. In the section of mathematics P.L. Tchebychev , member of the Imperial Academy of Sciences in St. Petersburg and correspondent member of the Parisian Academy of Sciences was named honorary president . The secretary of this section was Cyparissos Stephanos (1857-1917). But who was Stephanos?. In his letter on the 7 th of October 1882 to Holst, Sophus Lie revealed his particular happiness to have met Stephanos "He [Stephanos] seems to have found common appreciation as a talented mathematician ". During their sojourn in the city of La Rochelle, Tchebychev and Stephanos had many occasions to exchange their views on mathematics. The young Greek mathematician, who was also the archivist of the French mathematical Society took advantage of these precious discussions. Very soon he presented at the French Academy of Science his communication on metric and cinematic properties of conjugate quadrangles in which, as he quoted, generalized Tchebychev's proposition, which was presented at the Imperial Academy of Sciences in St. Petersburg regarding the very simple parallelograms furnishing rectilinear movement of fourth degree.

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Set theory as a path to the greatness of the Polish Mathematical School

Roman Duda[1]*

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Philosophy of Mathematics and Mathematical Practice. The Case of Polish Mathematical School

Jan Woleński[1]*

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Intuitionism, formalism and logicism were three principal positions in the philosophy of mathematics, when Polish Mathematical School (PMS, for brevity) was established. The Janiszewski program placed mathematical logic and the foundations of mathematics at the centre of mathematical research. Traditionally, both fields were gates of entering of philosophical ideas into mathematics. Moreover, Jan Łukasiewicz and Stanisław Leśniewski, professors of logic at the University of Warsaw and Leon Chwistek, the professor of logic at the University of Lvov (these cities were centres of PMS, were philosophers by their education. Also other members of PMS, like Zygmunt Janiszewski, Wacław Sierpiński or Alfred Tarski, had explicit philosophical interest These factors might justify an expectation that PMS was strongly influenced by philosophy. However, the situation was different. PMS sharply distinguished philosophy and mathematics and claimed that, philosophical assumptions shoud not restrict mathematical research. For instance, although it was pointed out that the axiom of choice was philosophically controversial, its actual role in mathematics became the primary subject. A comparison of PMS in this respect with other mathematical schools is interesting. For instance, formalists and intuitionists declared that mathematics should respect finitism or constructivism in mathematical methods, but their practice did not obey this declaration. PMS had no such problems. As a general result of this attitude, one might note that it caused the development of so-called mathematical foundations of mathematics, which was also considered as free of philosophical presuppositions. Consequently, metamathematics was used in solving mathematical problems, for instance, in algebra, topology or arithmetic.

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Mathematical problems inspired by St. Petersburg

Galina I. Sinkevich[1]*

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Peter the Great founded St. Petersburg on the islands in the Neva river delta in 1703, and in 1725 the Academy of Sciences was founded by his decree. Scientists were invited from Switzerland, France and Germany.

The Neva, which flows into many tributaries, formed islands, the largest of which is Vasilievsky Island. All Russian science began on Vasilievsky Island, where the Academy and the House of Academicians were situated on the Neva embankment. On the embankment itself, or near it, Leonard Euler, Daniel, Nicolaus II and Jacob II Bernoulli lived. Gabriel Lamé and Benoit Clapeyron lived near Fontanka embankment. We will discuss several events in their lives connected with St. -Petersburg.

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Juda Kreisler: A biographical sketch of a Lviv physicist and a popularizer of science

Andrij Rovenchak[1]* *Olha Rovenchak*[2]

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[2] Independent researcher, Lviv, Ukraine

We present a detailed biographical account and analysis of the works of Juda Kreisler (1904–the 1940s?), a theoretical physicist from Lviv. He was born in Tlumach, presently a town in the Ivano-Frankivsk oblast in the western part of Ukraine. In 1923, Juda Kreisler finished a gymnasium in Stanislaviv and entered the Philosophical Faculty of the University of Lviv (Wydział filozoficzny Uniwersytetu Jana Kazimierza [UJK] we Lwowie) to study physics. In 1932, he was promoted to the doctoral degree in physics under the supervision of Professor Stanisław Loria. For a short period in the 1930s, Juda Kreisler worked at the Department for Theoretical Physics of the University of Lviv and later returned to the University in 1940, after the Soviets reorganized it upon taking over Lviv in September 1939. His ultimate fate remains unknown: he is listed among Nazi-murdered Jewish employees of the University of Lviv in 1941–43.

Dr. Kreisler authored four scientific papers and four abstracts of conference presentations delivered at the Congresses of Polish Physicists in 1932–36. There is, however, another field, where he was extremely prolific in the late 1930s. We managed to discover 122 of his popular articles in Chwila [Wave], a local daily newspaper published by the Jewish community in Lviv during 1919–39. These articles cover various subjects, which can be tentatively divided into the following major topics: chronicles and personalia; history of science; discoveries, new studies and inventions; the applied value of science (in particular, with a focus on medicine and economy); interconnection between science and the war; organization of scientific life; Hitler's Germany and the problem of the so-called 'Aryan science'. While various branches of physics naturally occupy the largest share within disciplines reflected in Juda Kreisler's articles, he also discusses biology, chemistry, meteorology, and geology. The latter field is closely related to his professional career worked at the Geophysical Institute of the Joint-stock company for the exploration and exploitation of bituminous materials ("Pionier", Spółka akcyjna dla poszukiwania i wydobywania materiałów bitumicznych we Lwowie), where he spent nine months in 1936.

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Leopolis Scientifica. A book about history of exact science in Lviv

Oleh Petruk[1]*

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Lviv has a long-lasting scientific tradition. It is overviewed in the book entitled “LEOPOLIS SCIENTIFICA. Exact Sciences in Lviv until the middle of the 20th century”. Its English version is planned to be published this fall. This is a collection of papers written by experts in the field. The publication shows a panorama of the development of science in the city – from the beginning of "scientific studies" (i.e. from about the middle of the XVII century, when the Lviv University was founded) to the Second World War. The history of scientific centers in Lviv is described, namely, University, Polytechnic, Shevchenko Scientific Society. Then, the development of exact sciences – mathematics, physics, astronomy – is presented. In our talk, we give a brief overview of the book.

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Henri Lebesgue's visit to Poland in 1938

Olena Hryniv[1]* ***Yaroslav Prytula***[2]

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[2] Ukrainian Catholic University, Lviv, Ukraine

Henri Lebesgue had a direct and indirect impact on mathematicians in Poland. In 1938 Lebesgue was awarded the degree of doctor honoris causa of the Jan Kazimierz University. Before returning to France he visited Kraków, where he was also a guest of the Jagiellonian University and the Krakow Department of the Polish Mathematical Society.

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The relevance of selected problems in topology and functional analysis from the Scottish Book.

Stanisław Domoradzki[1]* ***Mykhaylo Zarichnyi***[1,2]

[1] University of Rzeszów, Rzeszów, Poland
[2] Ivan Franko National University of Lviv, Ukraine

Right formulation of the problem right is extremely important in mathematics. In 1900 David Hilbert delivered a talk "Problems of the future of mathematics" at the Second Congress of Mathematicians in Paris. He presented 23 problems and the authors of their solutions gained fame. In 1974 AMS organized a symposium on Hilbert's problems, and two volumes of Proceedings of Symposia in Pure Mathematics (1976) were published. Also, the Scottish Book of Lwów has been influencing the development of mathematics in the world for over 85 years. This book was a collection of problems formulated and discussed by representatives of the famous Lwów School of Mathematics. The sessions were held in the Scottish café.

The Scottish book contained 193 problems. Some of them turned out to be starting points for development of some areas of mathematics, in particular, functional analysis and topology. As examples, one could mention Banach's problem concerning homeomorphisms of certain infinite dimensional linear spaces as well as Borsuk's problem on homeomorphisms of infinite products. The latter lead to the formation of the infinite dimensional topology. The aim of the talk is to demonstrate the relevance and importance of certain problems from the Scottish book for modern mathematics.

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Astronomy in Lviv University during XIX century

Oleh Petruk[1]*

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250 years ago, on May 15, 1771, the Astronomical Observatory was opened in Lviv. A number of scientists who worked there have left the city after the partition of Poland in 1772 and Jesuit suppression in 1773. Astronomical observations were performed then by new Austrian scientists, mostly for mapping purposes. The tower of the observatory was demolished in about 20 years and a new room for astronomers was not built. Though some astronomical observations continue, and the University made a number of efforts to re-establish the observatory and create an astronomical chair, the only teaching of Astronomy were allowed during the XIX century in the Lviv University. The discipline was taught by professors of Mathematics and Physics. The existence of Astronomy in the University during that period will be reviewed.

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Ladislas Natanson and Alfred Landé versus Planck's law, the Boltzmann-Planck-Natanson statistics and the Bose statistics

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Samuel Dickstein and Philosophy

Paweł Polak[1]*

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Samuel Dickstein, known for his activities in the field of mathematics and the history of mathematics, remains almost unknown in the field of the history of philosophy. Although he was not an academic philosopher, he appealed to philosophy in many ways. To complete the picture of Dickstein's activities, therefore, it is necessary to trace the various references to philosophy in his writings and analyze them. In this way it will be possible to better understand Dickstein's contributions to science, and to Polish philosophy in particular.

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Dickstein and the Italians: Mathematics and Cosmopolitan Ideals between the Belle Époque and the Holocaust

Erika Luciano[1]*

[1] University of Turin, Turin, Italy

Samuel Dickstein, one of the major promoters of Polish science at the international level, intertwined with Italian mathematicians a large web of scientific relationships since 1891. He was in correspondence with Giuseppe Peano, Corrado Segre, Tullio Levi-Civita and their followers; he exchanged with them books and publications and translated into Polish some Italian mathematical works.

At the same time, Dickstein confronted with Italian colleagues on extra-mathematical subjects too: he shared Peano's pacifist and internationalists ideals and tackled with Levi-Civita and others the issues of the assimilation of Jews in Europe.

This talk provides an analytic picture of the socio-cultural exchanges that involved Dickstein and the members of the main Italian research communities, i.e. the mathematical Schools of Turin and Rome. I shall argue the idea that the network of relations that Peano, Segre, Levi-Civita and their protégés intertwined with Dickstein at the end of 19th century, set the ground for an intensification of scientific exchanges between Italy and Poland in the 1920s. At the same time, this network led to some beautiful episodes of cross-solidarity when Polish and Italian mathematicians faced the terrible period of anti-Semitic persecution and migration.

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Logic at the University of Poznań

Roman Murawski[1]*

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The aim of the talk is to outline the history of logic at the University of Poznań. Setting up and changes in organizational structures within the discipline, outstanding logicians connected and cooperating with the University of Poznan, distinguished students, review of achievements of Poznan logicians, and the scale of their impact will be presented.

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Polish mathematicians and astronomers of the second half of the 19th century

Jan Koroński[1]*

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The presentation contains selected more important information about Polish mathematicians and astronomers of the second half of the nineteenth century in Poland at the time of Poland's loss of independence in the context of the complicated political situation in Europe.
In particular, the subject of the presentation are the following issues:

(1) Introduction. Political conditions of the state of Polish Science in the 19th c.

(2) Polish research centers in the second half of the 19th c. operating in the field of Mathematics and Astronomy.

(3) General characteristic of Mathematics in the second half of the 19th c.

(4) General characteristic of Astronomy in the second half of the 19th c.

(5) Cracow mathematicians (University of Krakow) and astronomers (Astronomical Observatory in Krakow) in the second half of the 19th c.

(6) Vilnius mathematicians and astronomers in the second half of the 19th c.

(7) Warsaw mathematicians and astronomers in the second half of the 19 th c.

(8) Lviv (Lvov) mathematicians and astronomers in the second half of the 19th c. 9. Polish immigrant mathematicians in the second half of the 19 th c. (France, Germany, Russia, Peru, Argentina). Society of Exact Sciences in Paris.

(9) Conclusions.

Keywords: Biographic information of Polish mathematicians, Biographic information of Polish astronomers, History of Polish mathematics, History of Polish astronomers, Nineteenth century.

References:
[1] Koroński J., Polish mathematicians and astronomers of the first half of the 19th century (in preparation)
[2] Koroński J., Polish mathematicians and astronomers of the second half of the 19th century (in preparation).

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Annales de la Societe Polonaise Mathematique: the first journal of the Polish Mathematical Society

Marta Kosek[1], ***Margaret Stawiska-Friedland***[2]*

[1] Jagiellonian University, Cracow, Poland
[2] American Mathematical Society Mathematical Reviews, United States of America

We present the early history (the first 25 issues) of the first journal of the Polish Mathematical Society, Annales de la Societe Polonaise Mathematique. We discuss the circumstances of the journal's creation and the role it played for the Society and the development of Polish mathematics.

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Mazurkiewicz vs. Janiszewski - two different mathematics development projects (in Poland)

Wiesław Wójcik[1]*

[1] Jan Długosz University: Częstochowa, Poland

The project for the development of Polish mathematics presented by Zygmunt Janiszewski in the first volume of "Nauka Polska" is relatively well known. His article "On the needs of mathematics in Poland" became a manifesto of the emerging Polish school of mathematics. Janiszewski presented a postulate to establish a creative work center in Poland focused on one branch of mathematics (more precisely on set theory, mathematical logic, topology and related disciplines) and to establish a scientific journal publishing works in this selected branch. However, a year later, in the second volume of "Nauka Polska" in 1919, Stefan Mazurkiewicz publishes an article under the same title, in which he offers a different proposal for the development of Polish mathematics. He sees the need to build several centres using the existing scientific potential and tradition, developing various areas of mathematical knowledge. This is puzzling in the context of the fact that both of these mathematicians are considered to be the co-founders of the Warsaw school of mathematics. In the work, I will also show that they also had a different understanding of mathematics and the importance of individual mathematical disciplines. Moreover, Mazurkiewicz had much wider interests in mathematics than Janiszewski.

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Steinhaus Seminar of Applied Mathematics

Władysław Szczotka[1]*

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The talk will present the subject of the Applied Mathematics Seminar conducted in 1948-1960 by professor Hugo Steinhaus in Wrocław. It gives an outline of the history of cooperation between Wrocław mathematicians and representatives of other sciences and practitioners. It is based on the protocols of this Seminar. The Seminar was open for all people with different professions. Its main effort was to apply mathematics as much as possible in a wide range of issues. It gave the beginning of The Wrocław School of Applied Mathematics.

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Applications of Mathematics with Stanisław Trybuła

Krzysztof Szajowski[1]*

[1] Wrocław University of Science and Technology, Wrocław, Poland

The aim of this presentation is to illustrate the area of research of Professor Stanisław Trybuła in such a way as to show at the same time selected issues of applied mathematics developed in Poland in the second half of the 20th century. Over half a century of scientific activity of Professor Stanisław Trybuła is a good picture of the development of applied mathematics in Poland. He was interested in selected issues of mathematical statistics and its applications, stochastic models in power engineering, control theory and selected sections of game theory. He achieved significant results in Bayesian and minimax estimation and sequential methods for continuous time processes. In power engineering he described and implemented methods for synchronization of interconnected power systems. In game theory, most of his results are duel model analysis. He has been able to communicate his interests to others. He collaborated with both engineers and mathematicians, which stimulated the professional activities of all who participated. While presenting the professor's profile, we show the value of cooperation between a mathematician and specialists in other sciences.

In February 1972 Stanisław Trybuła, rich in experience from his work at Institute of Power Systems Automation (IASE), started working at the newly established Institute of Mathematics and Theoretical Physics (today the Faculty of Pure and Applied Mathematics) of the Wrocław University of Technology (now it is Wrocław University of Science and Technology). In 1973 he became an associate professor and in 1988 a full professor of mathematical sciences.

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MODCLIM project: goals, implementation and achieved results of international cooperation

Marek Skarupski[1]*

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In our presentation, we will present the MODCLIM project. Modelling Clinic for Industrial Mathematics took place in 2015-2016 . Co-financed by the European Union, although its scope was much wider, and research units from outside the EU also participated in it. We will present the goals of the organizers. We will describe the impressions of the participants of this project and present our short critical analysis of the effects of this project.

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200 Years of the Czech Textbook of Geometry by Josef Vojtěch Sedláček

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Josef Vojtěch Sedláček (1785–1836) was an important personage in the royal city of Pilsen and its surroundings in the first third of the 19th century. He was a Roman Catholic clergyman, a member of the canonical order of Premonstratensian monastery in Teplá, an excellent pedagogue, an active Czech awakener, author of textbooks of mathematics and physics, educational and popularization articles, celebratory poems and odes written in the Classicist spirit.
We will firstly devote ourselves to Sedláček curriculum vitae, his versatile pedagogical and educational activities and his role in the cultural and national revival of Czech society, then we will focus on Sedláček's textbook Základowé Měřictwj, čili Geometrye (Basics of Measurement or Geometry), which was published in Prague in the year 1822 and was the first Czech textbook of geometry.

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The prominence of Gdańsk Academic Gymnasium as a cornerstone of the intellectual activities in Gdańsk

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The Gdańsk Academic Gymnasium (1558-1817) was one of the first schools at the college level in Poland and became one of the most famous educational institutions in Europe of the 16th and 17th centuries. For almost 260 years, this school attracted one of the best professors and students of its era. In this short survey, we will outline the influence of the Gdańsk Academic Gymnasium on the intellectual life in Gdańsk and the Pommerania region.

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Introducing children to the world of geometry. Advantages of shaping intuition and outlines of concepts

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The analysis of psychomotor development shows that children create their first geometric intuitions from manipulative and spatial experiences. Tactile experiences of the shape of solids are important and talking about them and determining the location of three-dimensional objects in the environment. Then slowly - using educational support - they transform these intuitions into outlines of geometric concepts. Meanwhile, introducing children to the world of geometry in the Polish education system begins with plane geometry. In this presentation, I will discuss the dangers of this kind of regulation.

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Popularisation of mathematical knowledge through. photography, on the example of the International Competition Mathematics in Focus

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About designing a system of scientific awareness in the history of mathematics field

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The work will present a scheme for organizing research on the history of mathematics, containing the following stages:

(1) Detailed study of the subject area;

(2) Search for materials on a similar research topic;

(3) Using forums and scientific social networks to find answers to questions that have arisen;

(4) Search and study of primary sources;

(5) Reconstruction of the evolution of mathematical ideas;

(6) Testing the results at seminars and conferences;

(7) Preparation for publication;

(8) Motivation (prizes, scholarships and grants).

Using this scheme, systems of scientific awareness in the field of the history of mathematics are designed and specific tools for their implementation are proposed. Increased attention is paid to the methods of automated intelligent filling of a database containing primary sources and articles on the history of mathematics.

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Popularization of knowledge among adults. The meaning of visual communication

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Research of Lithuanian mathematics at the beginning of the 20th century: mathematical works of Prelate Alexander Jakštas-Dambrauskas

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The poster, dedicated to prelate Adomas Jakštas–Aleksandras Dambrauskas (Aleksandr Dąbrowski) (1860-1938), a Lithuanian encyclopaedist, Honorary Doctor of Mathematics of Lithuanian university in Kaunas, overviews the researcher's mathematical works and highlights his merits to the development of the science of mathematics in Lithuania.

The mathematical works written by the prelate may be divided into three groups. The first group would include original mathematical works and was published in Poland, France and Lithuania. The second group would comprise popularising and informative articles and booklets, and the third group would embrace school textbooks on mathematics.

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