

The Round Table of Mathematicians The history of the Mathematical Journal for Secondary Schools goes back more than one hundred years. The foundation of the journal had close connections with the boom of the scientific life at the turn of the century and to the foundation of the Mathematical and Physical Society. Let's go back to the previous century when the two most important centers of Hungarian culture were the Technical University in Budapest and the Bolyai University in Kolozsvár, Transylvania. The Round Table of Mathematicians was formed in Autumn of 1883, in Budapest and met regularly twice a month in a special room of a restaurant. Lectures were followed by a discussion, and later by dinner. There was no chairman and no ground rules. The society consisted of professors of mathematics and physics at the Technical University and teachers from various secondary schools. The Founding Fathers were **Lóránd (Roland) Eötvös, Jenő Hunyadi, Ágoston Scholtz, Kálmán Szily, Gyula König, Gusztáv Rados and Manó Beke**. They themselves gave most of the talks. Mathematics and physics were not separated as sharply as they are today. Many mathematicians liked to work on physics, and many professors found it hard to distinguish their respective fields. Those days many scientists tried to become polyhistorians. As Manó Beke wrote in 1911: *„We mathematics teachers enjoyed these evenings very much; we looked forward to them. We profited a lot, and received much material for further study. It was not the main purpose to present new results, although we heard new results from Hunyadi or Szily before they presented them at the Academy, and König presented a paper about the same time to us as to the Academy. Our goal was to get acquainted with the most important and most interesting recent publications. Just as we enjoyed the scientific lectures, the „mathematical dinners” following them were also memberable. Here the best researchers mixed with the teachers of the secondary schools.*

In an invitation in 1890 to a lecture by Eötvös on „Terrestrial Gravitation and its Measurement,” the letter also referred to further goals: „Dear Sirs! We have the hope that by meeting together we take the first step towards a regular gathering bringing us into closer contact with one another. With full respect, yours sincerely, Baron Lóránd Eötvös.” It was the merit of Eötvös to recognize the importance of an active scientific community on the cultural development of a nation.

It was Eötvös himself, who in 1890, came up with the idea of an organized society that would bring scientists together. Instead of using empty words, he had the following motto: „Let us learn from each other in order to teach better.” He wrote: *„The goal of our meetings is the further development of science by the spoken word, and the presentation of all important results from the journals. This does not seem to be more than the goal of the study groups of the students. Still, from these meetings it is possible for every teacher of mathematics and physics to become a mathematician and a physician. Thus we serve not only the schools but we raise the level of science in our country. Carrying out the task of self-education with dedication has the further result that in the future, new researchers arise out of our group ...”*

Gyula König formulated the condition of membership as *„not just anybody, but everybody who works on mathematics and physics and at making them more popular can be nominated.”*

The ground rules based on these ideas were accepted by the Ministry of the Interior on August 21, 1891, and the newly born society started recruiting new members.

The Mathematical and Physical Society In November 5, 1891, Lóránd Eötvös was elected president of the society, **Gyula König** the mathematical vice-president, and **Ágoston Schmidt** the physics vice-president. Eötvös was also president of the Hungarian Academy of Science and rector of Pázmány University of Budapest; König was the rector of the Technical University. The secretaries were **Gusztáv Rados** (mathematics) and **Géza Bartinek** (physics), recording secretaries **Lajos Kopp** and **Radó Kövesligeti**. At that time there were 298 members; but the membership quickly increased to 400.

Membership card number 1 was originally held by **Ányos Jedlik**, the Benedictine monk/professor, who constructed the dynamo in 1861, preceding Siemens by six years. (Between the two World Wars, the number 1 membership card was held by the Nobel laureate physicist **Eugene Wiegner**.) Lectures of the society were predominately about mathematics, as was natural at that time, but lectures on physics, such as the demonstration of X-rays in 1896, shortly after their discovery by **Röntgen**, were not uncommon.

One of the most important goals of the society was to start and secure the success of a mathematical and physics journal. Similar journals, such as the „Technical University Notices” (1876-1878), existed earlier, but for financial reasons only lasted two years. The Academy of Sciences published its „Mathematical and Natural Sciences Bulliten” with the special goal to publish only new results.

The first issue of the Mathematical and Physics Journal appeared in 1891. Eötvös summarized its goal as follows: „... not for the popularity of science and not to publish independent results, as other journals successfully achieve this goal. We publish popular articles about recent results for experts to use in proceeding with their research ...” In addition to the scientific articles, the journal also published articles to help mathematics and physics, such as articles about secondary school teaching.

Among the authors of the articles were many world famous mathematicians. Some of the articles included **Felix Klein's** „The Erlangen Program,” the first Hungarian version of **János Bolyai's** Appendix (originally in Latin), **Friedrich Gauss's** work on surfaces, **Lipót Fejér's** famous doctoral thesis, and many important results by **Frigyes Riesz, Zoárd Geöcze, Alfréd Haar**. It is impossible to list all the famous mathematicians who published all their results and thoughts in these pages.

The first editors of the journal were **Gusztáv Rados, Géza Bartoniek, Lipót Fejér, Győző Zemplém, Rudolf**

Ortvay, Dénes König. From 1930 on, the journal was helped by young graduates, who published their theses without monetary compensation. The publication of the journal was not without problems, mostly financial, and often issues would be skipped, or two issued would be published together in one joint issue. The journal has managed to survive all its problems and still exists today. The main goals of the journal remain unchanged: informative and original results, a problems section, solutions to previous problems, book reviews and events of the Society. The journal „Fizikai Szemle” („Physics Review”) began in 1950. This monthly is similar to „Physics World”, „Physikalische Blätter”, or „Physics Today”, but has a certain interplanetary character, as it has published and continues to publish papers by scientists like **Zoltan Bay, Nicolas Kurti, John von Neumann, Ede (Edward) Teller, and Eugene Wigner.** **In the Year 1894**

Lóránd Eötvös (1848-1919) was the founding father of professional research in physics in Hungary. He obtained his doctor's degree (together with the mathematician **Gyula König**) in Heidelberg in 1870. He became professor at the age of 30 at the University of Budapest (later to be named after him in 1950). He was the founder and first president of the Hungarian Mathematical and Physical Society. He remained its president until his death.

One of the high points of his career came in 1894 when he was nominated to be the Minister of Religion and Public Education. Members of the Mathematical and Physical Society commemorated his nomination by launching the **Eötvös Competition** for talented students finishing secondary school. Some of the winners of the competition include: **Lipót Fejér, Tódor (Theodore von) Karman, and Ede Teller.**

The year 1894, 100 years ago, marked three important events:

– The **Eötvös Competition** started.

– **Eötvös College** was established for the future teachers of the University. The college was named after **József (Joseph) Eötvös**, Lóránd's father, a liberal novelist and former Minister of Education and Culture who devoted his life to the cultural development of Hungary.

– The **Középiskolai Matematikai Lapok** („Mathematical Journal for Secondary Schools”) was established. The publication was originally targeted at high school math students, and later expanded to include articles about physics among its pages. ***already mentioned how it expands to include physics***

Mathematical Journal for Secondary Schools

The KöMaL came into existence apart from the framework of the Society, but not independently. In November of 1893, **Dániel Arany**, a high school teacher from the city of Győr, decided to found a journal for high school math students. The journal, the Középiskolai Matematikai Lapok (Mathematical Journal for Secondary Schools), published its first edition in December 1893, displaying its goals on the cover: „to give a wealth of examples to students and teachers.” At the time, there was only one other such journal in Europe, the *Journal de Mathématiques Élémentaires*, a journal published from 1876 by the French publishing company Vuibert. The journal's first edition appeared on January 1, 1894, and from then on put forth ten issues a year. We know of 132 subscribers in the first year. In the first three years, a total of 239 problems were published, for which 1055 solutions arrived for 208 problems from 151 students representing all parts of Hungary. The journal was successful, but struggled with financial problems...

In 1896, the editorship was taken over by **László Rácz**, a teacher at the Evangelical High School in Budapest. He had previously contributed to the journal and from this point on, he used the advantages of the capital city to help solve the business concerns of the journal. Dániel Arany continued to work enthusiastically on the journal, and in 1907, they were joined by **Márk Antal**, a business school teacher.

In 1897, **Sándor Mikola** got his first job at the Evangelical High School. He eagerly offered to write articles on physics for the journal, a suggestion that was well received by László Rácz, his co-worker. In the tenth year of publication, the journal added a physics problems column. From the yearly 120-180 problems, 2500-3000 solutions were received, and among the authors of the solutions were such names as Lipót Fejér, Mihály Fekete, Alfréd Haar, Tódor Kármán, Dénes König, György Pólya, Tibor Radó, Frigyes Riesz, Marcell Riesz, Gábor Szegő, Győző Zemplén

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László Rácz was forced to leave the journal at the start of the first world war. With his departure, the first successful period of the journal ended, and additionally, the publication was interrupted for more than a decade.