



Professor Ioan Gottlieb at his 80-th Anniversary

IOAN GOTTLIEB, b. 21.01.1929 in Baia-Mare (Romania), physicist and mathematician, head of the Theoretical Physics Department of Jassy University (since 1972 until his retiring in 2004, professor emeritus later on). He is the son of Vasile Gottlieb (b.c. 1897 Sighetul Marmatiei – d. 1945 in the concentration camp of Melk, Austria) and of Rosalia (b. Zelmanovits, d. 1934 in Baia-Mare). Vasile Gottlieb was a student of the Polytechnical Institute of Budapest only for the first year, before the breaking of the first world – war (1914). Thereafter, he was listed in the Austro-Hungarian Army as second lieutenant. Around the year 1928, Vasile Gottlieb left his locality to look for a job, together with his wife Rosalia, and, reaching Baia-Mare, is appointed as office worker at the chemical factory Phoenix (of sulphuric acid and other manufactured chemicals). Gradually, the chief heads of the factory having the possibility to verify the managerial qualities of Vasile Gottlieb (who, in Baia-Mare, discovered his own attraction toward mineralogy and was able to license some technological innovations) promoted him as superior office worker. So, ensuring the material conditions for their family, Vasile and Rosalia Gottlieb were in a position to devote all their careful attention to the little Janos (the future mathematician). After the death of his mother Rosalia, the obligation for the growing and for the intellectual forming of the child is taken over by Vasile Gottlieb (his father). When Janos was 6 years and half old, he was enrolled to pursue the elementary school in Romanian language (1935–1939). Thereafter, he is enrolled in the first class of the Lyceum Gheorghe Sincai in Baia-Mare (1939–1940). Meanwhile, Vasile Gottlieb already remarried, his second wife being since 1936, Lili Garai.

When Hungarian troops occupied the Northern region of Transylvania, as a result of the Vienna Diktat (30 August 1940), he ended the first class of Lyceum and was registered as Janos Gottlieb. Under this name he may be found until the summer of the year 1945. The family Gottlieb decides to not leave the occupied zone, and in this time Janos continues to be a pupil of the same Lyceum open again but having Magyar language for teaching. During the period 1940–1943 Janos has the leisure necessary for covering the classes from II to IV of the Lyceum in which he was enlisted.

In 1943 two major events happen, being able, by their consequences, to change the fate of the war: the capitulation in Stalingrad (2 February) and the capitulation in Tunis (13 May). A series of countries which, owing to various reasons entered the war of the same side as Germany (Finland, Romania, Hungary, Italy), look now the ways to escape from the alliance with Hitler. On 13-th October 1943, Italy led by the marshal Pietro Badoglio, declares war to Germany. The Italian tentative for his detachment was unsuccessful, but it waked the Hitler's fearsings about the similar defections to other countries among their allies. Accordingly he ordered, on 19-th March 1944, to German Army to invade Hungary (Operation Margarete). Hungary was, after the defeating of the Bela Kun red revolution, a kingdom whose leader was the regent Miklos Horthy of Nagybanya (Magyar denomination for Baia-Mare). It seems plausible to assume a certain protection over the town Baia-Mare on behalf of the state chief. This protection was lost after the event of 19 March 1944. At the same time, Baia-Mare was one of the centers of active propaganda of the party "crosses with arrows" led by the major Szalasi Ferenc – an extremist one. After 19 March, the fascists of Szalasi become very zealous in promoting the anti-Semitic legislation. The family of Gottlieb is forced to bear as a distinctive sign the David's yellow star. On 3-rd May 1944 the Jews of Baia-Mare are gathered in a ghetto at the outskirts of the town, and about one month later, on the first June 1944 the whole Gottlieb's family, including the grand fathers and grand mothers are pressed in railway wagons and the train departed for Auschwitz. The travel lasted about 3 days. The young Janos, together with his father Vasile Gottlieb, passed through three concentration camps: Auschwitz, Mauthausen and Melk. The permanent starvation, the exhausted effort of work, the severe punishments for any turning off, the lack of the elementary conditions of hygiene and the lack of medicaments are the main recollections of a concentration camp. These recollections are so over whelming as for producing long lasting nightmares. Usually reserved about the data of his own biography, professor Ioan Gottlieb decided however at the beginning of the year 2007, to detach himself from his reserve and to reveal the hell experienced by him, when, he was only 16 years old, in a Nazi concentration camp, stating that such events should never repeat. To see in this respect the article "The man who survived from a Nazi concentration camp to an other" the Romanian daily "Evenimentul Zilei" 28 January, 2009, *ibid.* The interview on the same subject at the Romanian

Television Soc., the rubric Realitatea TV on 23-rd February 2009. A more extensive paper, again on the same subject, this time including many data of personal biography of Ioan Gottlieb is to be found in the journal "Studia et Acta Historiae Judaeorum Romaniae", v. 10, pp. 258–290, Bucharest, 2007. On 5-th May 1945, Ioan Gottlieb was set free from the camp Mauthausen by the American Army and hospitalized in the army's sick room at Ebensee (Austria) for recovering his health almost critically damaged.

On first July 1945 Ioan Gottlieb decided, at his liberation from the military infirmary, to come back in Baia-Mare. Resorting to a legal dispense, he was in a position to recover the lost year and to come up with his colleagues of the same generation. After going in 1947 for his school-leaving examination (i.e. passing the "baccalaureate") Ioan Gottlieb becomes an attendant student of the Mathematics Faculty in the Bolyai University of Cluj. In 1951 he obtained the licence diploma in pure Mathematics. On the internet page of professor Ioan Gottlieb we come across a rich activity in various fields of pure and applied mathematics. His Curriculum vitae presents his impressive professional activity both scientific and didactic, the international prestige of which he really rejoices at home and outside. The scientific activity of Ioan Gottlieb covers the following fields of Physics: a) Gravitation and General Relativity, b) Differential Geometry, c) Quantum Physics, d) History and Philosophy of Science, e) Fractal Physics.

In 1949, when he was still a student in Cluj University, Ioan Gottlieb is appointed as second assistant for the course of Mathematical Analysis. After passing the licence examination in 1951, he is promoted as assistant till 1952 when is registered as attending the lectures for getting the title of Physics Doctor under the leadership of professor Theofil Vescan in Jassy. In December 1952, Ioan Gottlieb changes his place of activity from Cluj to Jassy for having a more direct connection with the subject of his future Doctoral thesis. So, he becomes a member of the department of Theoretical Physics and the Structure of Matter. This department was held by Theophil Vescan since 1950. In the new climate of research, Gottlieb adhered more and more to the Vescan ideas, namely those regarding the foundation in Jassy of a School of Theoretical Physics. In 1963, Theofil Vescan passes away after an unforeseen accident. Four years later, Ioan Gottlieb is promoted as lecturer (1967). His thesis, about the study of some metrics in General Relativity Theory was successfully held in 1962. In 1972, Ioan Gottlieb is appointed as the head of the department, this scientific position being maintained until his retiring in 1990. In 2004 at his 75-th anniversary he was awarded as professor emeritus of the University. In 1990, at a short time after the revolutionary events, Ioan Gottlieb took the initiative of founding a non-profit Romanian Society of Gravitation and General Relativity (registered as such at the Tribunal). This initiative was actually a prolongation of a previous one, namely the Research Contract on Gravitation performed between the Institute of Electrotechnical Research Bucharest and Jassy University on a side (as accomplisher) and National

Council of Scientific Research on the other side (as sponsor) (c. 1975-c. 1985). The Romanian Gravitation Society was very active in stimulating and organizing the actions pertaining to relativity theory and quantum mechanics. Another action of major scientific significance in which Ioan Gottlieb was involved (with his rich mathematical experience) was the participation to the international symposiums known as G.R.-X (G.R. – stand for the words General Relativity and X stands for the year. X being confined between 1977 and 1997). Among several actions undertaken by professor Ioan Gottlieb with the aim of promoting modern physics in Romania we have to point out the Summer School of Theoretical Physics in Bistritza-Nasaud (since 1992 on).

The list of scientific papers and of university textbooks of physics, due to professor Ioan Gottlieb and of his co-workers is really impressive. It summarizes more than 100 papers of physics and more than 10 textbooks. In the sequel is given only the list of the textbooks.

1) Lectures on elementary particle physics by Theofil Vescan, Editura Didactica si Pedagogica, 1963 (in Romanian). In this book, Cap. III named “Quantum and Relativistic Theory of Electrons” about 75 pag. is due to Ioan Gottlieb; 2) The origins of quantum mechanics, by Ioan Gottlieb, 128 pag., 1973, Univ. Iasi; 3) Quantum Theory of Fields, Booklet I, Colab. Ioan Merches, 1975, 252 pag. Univ. Iasi, 4) Quantum Theory of Fields, fasc. II, 181 pag., colab. Ioan Merches and Dorian Tatomir, 1981, Univ. Iasi; 5) Quantum Mechanics (2-nd Edition), 200 pag., 1982; 6) Fundamenta of Quantum Mechanics, colab. Ciprian Dariescu and Maria-Aura Dariescu, 586 pag., Chisinau, 1995; 7) Problems of Electricity and Magnetism (2 volumes), colab. Vasile Tutovan, 392 pag., Chisinau, 1996; 8) Free Quantum Fields, colab. C. Dariescu and M.-A. Dariescu, Edit. BIT, 574 pag., 1998; 9) Quantum Mechanics, colab. C. Dariescu and M.-A. Dariescu, Edit. BIT, 302 pag., 1999; 10) Theory of Special Relativity in three volumes, colab. Gh. Maftai, Cleopatra Mociutchi, Irina Mazilu, and D.A. Mazilu, vol. I, 232 pag, 2001, Vol. II, 297 pag, 2002, vol. III, 336 pag., 2007. For completing the list of the lectures held by professor Ioan Gottlieb we have to add: 1) Thermodynamics and Statistical Physics; 2) Quantum Theory of the Solid State; 3) Astronomy; 4) Mathematical Methods of Physics; 5) Non-linear equations of Theoretical Physics.

Among the distinctions afforded to Ioan Gottlieb we have to point out the titles of member of the Academy of Science in New York and that of member of European Academy of Science and Arts. At the same time, he is a member of the American Mathematical Society, a member of the COSPAR (Committee for Space Research – an international cooperation corpus), and still to other remarkable societies of science and culture.

Ioan Gottlieb accorded a special attention to the doctorship activity. Pursuing the idea of founding a Theoretical Physics School in Jassy after 1963, he achieved this major objective by forming specialists in various domains of modern

theoretical physics within the doctorship activity. The number of doctor's degrees accorded is impressive 27. The main accent is put on mathematics. On the other side, Physics is seen rather as a fertile field of applying mathematics. Each subject of a thesis was chosen as for solving a theoretical question previously not entered upon. Many of the doctors in physics made by Ioan Gottlieb became, at the expense of time, members of the Theoretical Physics Department of Jassy University and contributors together with professor Gottlieb to the elaboration of a new and modern series of University textbooks. Lady Cleopatra Mociutschi (PhD in 1978), the wife of prof. Ioan Gottlieb, is herself involved in this activity concerning the modernization of theoretical physics. We are convinced that in Jassy, toward the end of the XX-th Century, we may speak about a School of Theoretical Physics, whose merit is to be assigned to Prof. Ioan Gottlieb. We sincerely rejoice of the success of the theoretical physics in Jassy and wish many and happy years to Professor Ioan Gottlieb.

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