



**PROFESSOR IULIAN COROIAN
AT HIS 60'S ANNIVERSARY**

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This year, the Department of Mathematics and Computer Science from the North University of Baia Mare, has celebrated professor Iulian Coroian, head of the department, on his 60th anniversary.

Professor Julian Coroian is one of those who, for 37 years has made a major contribution to the development of the tertiary education in Baia Mare. Besides being a mathematician and professor he also was deputy-dean, dean, head of department, president of the Romanian Society of Mathematical Sciences for the Maramureș county.

Born on February 3rd, 1938 in Dej, Cluj county, Julian Coroian attended primary and then the "Andrei Mureșan" secondary school in his native town. He took his university degree in 1960 at the Faculty of Mathematics and Physics from the University of Cluj.

He started his teaching career at "Școala medie Nr. 1" called at present Gheorghe Șincai College, where he taught for one year only. In 1961 he was accepted as assistant professor at the Higher Training Institute from Baia Mare, which was a new teacher training college.

It was at this institute, which later developed into the North University where, step by step Julian Coroian became a senior lecturer, a reader and in 1990 he got the "professor" degree.

Among the positions he held at various times, we mention those of:

- deputy-dean of the Engineering College (January 1990-September 1990)
- dean of the Faculty of Letters and Sciences (1990-1995)
- head of the Department of Mathematics and Computer Science (1997 and present)
- president of the Maramureș county branch of the Romanian Society of Mathematical Sciences.

- editor of the Scientific Journal of the North University, series B, Mathematics and Computer Science (from 1990)
- member of the European Mathematical Society, as well as of the American Mathematical Society
- reviewer to the "Zentralblatt für Mathematik" and to the "Mathematical Reviews"

He got his doctoral degree in Mathematics in 1972 at the Babes-Bolyai University from Cluj, under the supervision of the eminent professor Dumitru I. Ionescu. His dissertation was on "Contributions to the Numerical Integration of Differential Equations by Runge-Kutta Types Methods".

Some of the outstanding results of professor Julian Coroian in the field of numerical analysis are:

- 1) He got some results about the existence of the solutions and the numerical solving of the operational equations in Banach spaces by iterative methods, mainly Newton type methods.
- 2) He derived some classes of Runge-Kutta methods, with high order for differential equations of the first order and higher order as well as integral equations of Volterra type and some methods for estimation of truncation error.
- 3) He obtained some quadrature formulae of higher order from numerical integration methods of Runge-Kutta type.
- 4) He extended some Runge-Kutta continuous methods to the differential algebraical systems.
- 5) He derived new general linear methods for initial values problems.

The results professor Julian Coroian reached at were favourable reviewed in many journals and his papers are cited in the Romania and abroad.

As a teacher, he taught many courses: Arithmetics and Theory of Numbers, Statistics Probabilities, Mathematics, Analysis, Differential and Integral Equations, Functional Analysis. He has published seven text-books for students.

The North University from Baia Mare, the Faculty of Sciences and the Department of Mathematics and Computer Science are proud of counting among its members professor Coroian, an outstanding personality, to whom, his colleagues, friends and collaborators wish on the occasion of his 60 anniversary a sound health and many future accomplishments in the field of mathematical science and his life.

A SELECTIVE LIST OF PAPERS PUBLISHED BY JULIAN COROIAN

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2. Metoda Newton-Kantorovici pentru ecuații operaționale neliniare

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3. Asupra metodelor iterative de tip Newton , Studii și cercetări matematice , Acad. RSR 22, I , p. 31 - 38 (1970)
4. Despre o generalizare a metodei lui Newton - Kantorovici , Bul. Șt. Inst. Ped. , Baia Mare , Seria B , 2 , p. 195 - 201 (1970)
5. Asupra metodelor Runge - Kutta - Fehlberg , pentru ecuația integrației Volterra . Studii și cercet. mat. , Acad. RSR , 26 , 4 , p. 505 - 511 (1974)
6. Formule de tip Runge- Kutta pentru ecuația integro-diferențială Volterra . Studii și cercet. mat. Acad. RSR , 26 , 4 , p. 513 - 520
7. Despre estimarea erorii la unele metode de tip Runge - Kutta , în volumul "Lucrările sesiunii științifice Jubiliare a Inst. Politehnic Cluj - Napoca ", 28 - 29 oct. 1978 , p. 7 - 14
8. Contribuții la integrarea numerică a ecuațiilor diferențiale cu ajutorul metodelor de tip Runge- Kutta , Teza de doctor , Univ. "Babeș- Bolyai" Cluj - Napoca , (1978)
9. A fifth order family Runge - Kutta type methods , Studia Universitatis Babeș - Bolyai , Cluj - Napoca , Matematica , 14 , 2 , p. 57 - 63 , (1979)
10. An error estimation formula for numerical integration methods of high order , matematica - Revue d'analyse numérique et de théorie de approximation Acad. RSR , Filiala Cluj - Napoca , 3 , pag. 241 - 245 (1980)
11. Unele formule de cadratură deduse din formule de integrare numerică . Bul. Șt. IS Sibiu , Seria Tehnică-Matematică , vol. IV pag. 10 - 16 (1981)
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13. Asupra unei metode semisimplicite de integrare numerică a ecuațiilor diferențiale , în volumul Lucrările Conferinței de Matematică Aplicată în Mecanică Inst. Politehnica Cluj - Napoca , 20 - 30 oct. 1988 , pag. 262 - 270
14. Caracterizarea funcțiilor cu proprietatea lui Darboux , Aplicații , Lucrările Seminarului de Creativitate Matematică , Univ. Baia Mare , vol. I , 125-131 , (1992)
15. On the common origine of some iterative methods , Bul. Șt. Univ. Baia Mare , Fasc. Matematică - Informatică , vol. X , 39 - 44 , (1994)
16. Aspects of Higher Mathematical Education in Romania , conferință ținută la Northeast Missouri State University , Kirksville , USA , 2 August 1995
17. On some continuous Runge-Kutta methods , Bul. Șt. al Univ. Baia Mare , Seria B , Matematică - Informatică , vol. 12 , p. 191 - 202 (1996)
18. On Runge - Kutta Methods for Differential Algebraic Systems (în colab.) , International Computer Science Conference MicroCAD'97 , Febr. 26 - 27 1997 , University of Miskolc , Ungaria , pag. 45 - 51 (1997)
19. Birkhoff- Hermite Bivariate Spline Interpolation Procedures (in colab.)

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22. On the general linear integration methods , Bul. řt. Univ. Baia Mare , seria B, Matematică-Informatică , vol. 13, p.51 - 56, (1997)
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