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Nicolae Popescu (mathematician)

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0.1 Acad. Nicolae Popescu, PhD,D.Phil.

(b. 22 September 1937 at Strehaia, Comanda –d. 29 July 2010 in Bucharest, Romania), was a Romanian mathematician. He became a Member of the Romanian Academy in 1991 and an Emeritus Professor in 2001.

His areas of expertise were: Category theory, Abelian categories with applications to Rings and Modules, **Adjoint Functors**<http://planetmath.org/encyclopedia/AdjointFunctors.html>, and limits of a functor/colimits. (<http://planetmath.org/encyclopedia/AdjointFunctor.html>), Theory of Rings, Fields, Polynomials, and Valuation Theory. He also had interests and published in the following areas: Algebraic Topology, Algebraic Geometry, Commutative Algebra, K-Theory, Class-Field theory, and Functional Analysis/Algebraic Function Theory. He published between 1962 and 2008 more than 102 papers in peer-reviewed, mathematics journals, several monographs on the theory of sheaves, and also six books on Abelian category theory and abstract algebra. In a Grothendieck-like, energetic style, he initiated and provided scientific leadership to several seminars on category theory (<http://planetphysics.org/encyclopedia/FunctorialAlgebraicGeometry.html>; see Seminars on Algebraic Geometry and Category theory), sheaves and abstract algebra which resulted in a continuous stream of high-quality mathematical publications in international, peer-reviewed mathematics journals by several members participating in his Seminar series. His book “Abelian Categories with Applications to Rings and Modules” (Nicolae Popescu. Abelian Categories with Applications to Rings and Modules, Academic Press, L. M. S. Monograph No.3, London, 1973, ISBN 0 – 12 – 561550) continues to provide valuable information to mathematicians around the world. His latest contributions have also branched into valuation and number theory. He has published over 100 original peer-reviewed articles on mathematics, mostly in category theory, algebraic geometry, Galois and number theory.

Nicolae Popescu was elected a Member of the Romanian Academy in 1992, and he was best known for his contributions to Algebra, the theory of Abelian categories and Number Theory. Since 1964 he collaborated on the characterization of abelian categories with the well-known French mathematician Pierre Gabriel.

0.2 Biography

Acad. Nicolae Popescu was married, and there are a surviving wife Liliana and three children. He earned his M.S. degree in mathematics in 1964, and his

Ph.D. degree in mathematics in 1967, both at the University of Bucharest. He was also awarded a D. Phil. degree (Doctor Docent) in 1972 by the University of Bucharest.

In 2009, and prior to 1976, he carried out mathematics studies at the Institute of Mathematics of the Romanian Academy in the ([http : //www.imar.ro/prez/prez_algebra.htm](http://www.imar.ro/prez/prez_algebra.htm) in the Algebra research group), and also had international collaborations on four continents. One found from conversations with former Academician Nicolae Popescu that he shared many moral, ethical and religious values with another renown mathematician French-German-Jewish, Alexander Grothendieck who visited the School of Mathematics in Bucharest in 1968 at the invitation of Acad. Miron Nicolescu and at the urging of Dr. Nicolae Popescu. Like Grothendieck, he had a long-standing interest in category theory, number theory, practicing Yoga, and supporting promising young mathematicians in his fields of interest. He also supported the early developments of category theory applications in mathematical biology, relational biology and mathematical biophysics.

0.3 Academic positions

Popescu was appointed as a Lecturer at the University of Bucharest in 1968 where he taught graduate students until 1972. Since 1964, he also held a Research Professorship at the Institute of Mathematics ([http : //www.imar.ro/nipopesc/](http://www.imar.ro/nipopesc/)) of the Romanian Academy, which institute was ruthlessly eliminated by former dictator and president of S.R. Romania, Nicolae Ceausescu in 1976 for reasons related to his daughter Zoe Ceausescu who was 'hired' by the Mathematics Institute in Bucharest two years before.

0.4 Books published

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- *15. Elemente de teoria fasciculelor IV, St. Cerc. Mat. (1966) 647-669. Sheaf theory elements: IV
- *16. Elemente de teoria fasciculelor V, St. Cerc. Mat. (1966) 945-991. Sheaf theory elements: V

- *17. Elemente de teoria fasciculelor VI, St. Cerc. Mat. (1967) 205-240.
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- *19. Quelques observations sur les topos abéliens, Rev. Roum. Math. Pures Appl. 12 (1967), 553-563. (with C. Nastasescu)
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