



Mathematics Bulletin

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....SIMPLY BECAUSE 'THEY ARE MATHEMATICIANS...

A mathematician is as social as anybody else in the community. He feels about social concerns, realizes his social responsibilities, and contributes in social wellbeing as much as any other community member does. His birth takes place like all the other human beings, his growth has no exceptional schedule; his eating, feeding, and even

sleeping habits are similar to others. A mathematician, like other members of society, grieves on losing as deeply as amuses on winning, enjoys cool breeze in summer as good as gets pleasure from sunshine in winter, becomes sad on accidents as intensely as getting excited on pleasant incidents. In short, mathematicians have same physical, mental, and social capabilities as any other social group of community possess, and they behave as others do in society. Although, mathematicians are active social members of society as anybody else, yet it is perceived that mathematicians have monotonous personality without social role. Beside the fact that it is just a myth about mathematicians' community, unfortunately, mathematicians are themselves inspired and influenced by this myth, which might be observed from their behaviors towards music, poetry, literature, nature's beauty, social events, and the community around them. They may have good taste of music but yet pose as 'not interested'; they may enjoy poetry but yet recognize it is just 'a world of imagination' and 'a wastage of time', they might have been reading literature with passion but will refrain after they realize 'they are mathematicians'. These so-called mathematicians proved themselves as parsimonious even in appreciating the natural phenomenon like rain, rainbow, sunrise or sunset etc. simply because now 'they are mathematicians'. Some mathematicians hesitate to discuss even about the hot issues in town like terrorism, budget, or emerging trends in social attitudes and behaviors, simply because they believe 'they are mathematicians'. I strongly believe that it is not the 'Mathematics' which changes the thinking of mathematician but the influence of perceived concept about being a mathematician by himself.

Tajammal Hussain

Asst. Professor

ABOUT THE FAMOUS MATHEMATICIAN

Joseph Louis Lagrange

Jan 25, 1736— April 10, 1813



Lagrange became a Professor of mathematics at the Royal Artillery School in Turin at the age of 19. At the age of 40 he was appointed Head of the Berlin Academy, succeeding Euler. Major contributions made by Lagrange are the theory of numbers, the theory of equations, ordinary and partial differential equations, the calculus of variations, analytical geometry, fluid dynamics, and celestial mechanics. In 1793, Lagrange along with Laplace and Lavoisier devised a new system of weights and measures. Out of this came the metric system. His methods for solving third- and fourth-degree polynomial equations by radicals laid the groundwork for the group-theoretic approach to solving polynomials taken by Galois. He was a very careful writer with a clear and elegant style.

UPDATES

Dr Ghulam Qanber Abbasi attended the seventh meeting of Board of Faculty held on Saturday 30 th May 2009 at Islamabad.

Dr Ghulam Qanber Abbasi chaired the session of Computational Complexities , Innovations and solutions on 11 –12 th May in Techno Moot .2009

A GREAT LOSS

The last month brought the sad news of the death of a profound mathematician. Professor Dr Q.K. Ghorl. He was born in 1932. He started his academic career in 1952 as a lecturer and later earned his PhD degree from University of British Columbia ,Vancouver Canada in 1960. He served the educational institutions for more than 55 years. He was advisor at Department of Mathematics at COMSATS Institute of Information Technology, Islamabad since 2000. He was awarded life time achievement award by School of Mathematical Science. He will always be remembered for his unforgettable services. May Allah bless his soul with eternal peace.



A paper on “ Impact on female employee’s job performance”by Irfan Yousaf(Asst. Professor), Syed Muhammad Irfan (Asst. Professor) & Tajammal Hussain (Asst. Professor) has been accepted in Journal of Quality Management, Punjab University .

THE BIRTH OF JUNIOR SHAHBAZ

Allah Has blessed Mr. and Mrs. Qaiser Shahbaz with a third baby boy on 2nd May 2009. All the faculty members heartily congratulate them on this pleasant occasion.

MS PRESENTATION SERIES

Structure of Artinian Rings by Waqas Ahmad Baig

Artinian rings were discovered by an Austrian Mathematician, Emil Artin (1898-1962). Artinian and Noetherian rings are two major structures in algebra. Structure of Artinian rings is very restricted (e.g. an Artinian ring is necessarily a Noetherian rings). Emil was the first person who discovered that descending chain condition on ideal generalizes both classes of rings simultaneously.

Artinian and Noetherian rings are those commutative rings which satisfies descending and ascending chain condition on every non-empty set of ideals (or we can say that a commutative ring which has no infinite decreasing or increasing chain of ideal are Artinian and Noetherian rings). It is true that every Artinian ring is a Noetherian ring but converse is not true in general. In fact Noetherian rings having some special properties are Artinian rings.

These are the main points of the presentation,

In an Artinian ring every prime ideal is maximal.

In an Artinian ring nilradical is equal to Jacobson radical.

An Artinian ring has only a finite number of maximal ideal.

In an Artinian ring nilradical is nilpotent.

If A is a ring in which 0 ideal is product of maximal ideals then A is Artinian iff A is Noetherian.

A ring A is Artinian iff A is Noetherian and Krull dimension of A is zero.

Localization of a ring.

Artinian local rings.

And finally,

(BASIC STRUCTURE THEOREM FOR ARTINIAN RINGS)An Artinian ring A is uniquely (up to isomorphism) a finite product of Artin local rings.

PRIMARY DECOMPOSITION

by
Riffat Perveen

Motivation for the concept of “**Primary Decomposition**” is: “*Factorization of an integer into its components (power of prime)*” which is the concept of “**Number Theory**”. When we generalize this concept in “**Commutative Algebra**”, prime components are referred as “**primary ideals**”, integer as “**ideal**” and the whole concept is referred as “**primary decomposition of an ideal**”.

RESEARCH IN PROGRESS

Sarfraz Ahmad, Imran Anwar, ‘*Stanley Decomposition and Partition of Simplicial complexes*’, accepted for the publication in the proceeding of LUMS 2nd International Conference on Mathematics and its Applications in Information Technology, Lahore.

M. Hussain, Nayyer Iqbal, Shahid Ahmed (2008), Open loop control of Lyapunov exponents at fixed points of nonlinear oscillator, submitted in Applied Mathematics Letters.

Muhammad Raffiullah, “A new approach to solve the system of second order non-linear differential equations using homotopy perturbation method”. Submitted.

Qaiser Shahbaz. Exact sampling distribution of reliability coefficient under the Rayleigh model. Submitted

Muhammad Maohsin. Reliability Analysis of Erlang-truncated exponential distribution” Submitted for the publication to Mathematical Methods of Statistics. Submitted

Kashif Ali, Edy Tri Baskoro, Ioan Tomescu (2008), On Path-sunflower Ramsey numbers, submitted in the journal of Discrete Mathematics

Saman Shahbaz .The concomitant of order statistics for bivariate inverted Rayleigh distribution wsubmitted.

D. Vieru , I. Siddique, “Some series of generalized functions and their application”, sent for publication .