talk

IDEALS IN MATRIX NEARRINGS AND GROUP NEARRINGS

Kuncham Syam Prasad [a] , **Kedukodi Babushri Srinivas** [b] and **Bhavanari Satyanarayana** [c]

[a],[b] Department of Mathematics,
Manipal Institute of Technology, Manipal University, Manipal, Karnataka, India
kunchamsyamprasad@gmail.com [presenter, corresponding]

[c] Department of Mathematics,
Acharya Nagarjuna University, Nagarjuna Nagar-522510, A.P., India

Let N be a zero symmetric right nearring with identity 1 and N^n denote the direct sum of n copies $(n \geq 2)$ of the underlying group $(N,+)$. We consider the $n \times n$ matrix nearring over N, denoted by $M_n(N)$, generated by the set of functions $\{[a;i,j] : 1 \leq i,j \leq n, a \in N\}$. It is well known that ideals in the base nearring N and related ideals in the corresponding matrix nearring $M_n(N)$ have been extensively studied in $[5,11,13]$. In this talk, some observations have been made on idempotent elements, nilpotent elements in the nearring and the corresponding matrix nearring. In case of a finite group G, with $|G|=n$, the notion of group nearring, defined in [3], is closely related to $M_n(N)$. Few analogue relationships between the ideals of nearring and that of group nearring are presented. For preliminary definitions and results on nearrings, we refer [6, 12].

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