

ON NIM REPRESENTATION THEORY

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Time: Fri, Dec. 20, 09:30-11:30

Venue: Room 110, SCMS

Abstract: The non-negative integer matrix (NIM) solutions of matrix equations are closely related to the NIM representations over fusion rings and the module categories over tensor categories. In this talk we shall introduce a general theory of irreducible NIM representations over near group fusion rings. We give the minimum upper bound of rank of NIM representation over a near group fusion ring, and the general classification methods of irreducible NIM representations over near group fusion rings. We give explicitly the classifications of irreducible NIM representations over some near group fusion rings and introduce some new trends in this direction.