

International J. of Math. Sci. & Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 8 No. IV (July, 2014), pp. 225-250

COMBINATORIAL ASPECTS OF TANABLE ALGEBRAS

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Abstract

In this paper, we introduce Gram matrices of Tanabe algebras. We prove that the Gram matrix is similar to a matrix which is direct sum of block submatrices. In this connection, Generalized Stirling numbers of the second kind are introduced and their identities were established. Using the results in [8], we also compute the eigenvalues of Gram matrices of Tanabe algebras.

Key Words : *Gram matrices, Eigenvalues and Tanabe algebras.*

2000 AMS Subject Classification : .

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