



LAMÉ'S EQUATIONS IN ASSOCIATION WITH JACOBIAN
ELLIPTIC FUNCTION FOR TYPE $A_1(m)$

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Abstract

We give Lamé's equations in association with Jacobian elliptic function ([E. T. Whittaker and G. N. Watson, A Course of Modern Analysis, 4th Edition, Cambridge University Press, 1927]) for the deformed root system of type $A_1(m)$ ([A. P. Veselov, M. V. Feigin and O. A. Chalykh, New integrable deformations of the quantum Calogero-Moser problem, Uspekhi Mat. Nauk 51(3) (1996), 185-186], [L. A. Khodarinova, Quantum integrability of the deformed elliptic Calogero-Moser problem, J. Math. Phys. 46(3) (2005), 1-22]).

Keywords and phrases: Lamé's equation, Jacobian elliptic function, deformed root system $A_1(m)$.

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