



**SCHRÖDINGER OPERATORS AND THEIR ψ FUNCTIONS
FOR TYPE $A_1(m)$**

Tadayoshi Takebayashi

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Abstract

We calculate the ψ functions for Schrödinger operators of the deformed root system of type $A_1(m)$ ([O. A. Chalykh and A. P. Veselov, Commutative rings of partial differential operators and Lie algebras, Comm. Math. Phys. 126(3) (1990), 597-611], [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 (in Russian)], [L. A. Khodarinova, Quantum integrability of the deformed elliptic Calogero-Moser problem, J. Math. Phys. 46(3) (2005), 033506, pp. 22]).

Keywords and phrases: Schrödinger operators, ψ functions, deformed root system $A_1(m)$.

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