

1056-35-1498

Chunli Chen* (clchen@sjtu.edu.cn), Department of Mathematics, Shanghai Jiao Tong University, 800. Dongchuan Rd, Shanghai, 200240, Peoples Rep of China. *The exact solutions of Lund-Regge equation and its soliton surfaces.*

By Darboux transformation, we get one new group of exact solutions of Lund-Regge(LR) equation which describes the motion of some strings. According to Sym's formula and the isomorphism between R^3 and $su(2)$, the surfaces can be expressed by a 2×2 matrix in $su(2)$. The analysis form of one soliton surfaces and double soliton surfaces are obtained and the properties of the surfaces also are studied. (Received September 22, 2009)