

1077-39-1070

Adrian Stefan Carstea* (carstea@gmail.com), Srg. Latea Gheorghe Street, #15,
Bl.C71,Ap.18, Bucharest, Romania. *On the Q_4 -elliptic Painleve equation and rational elliptic surfaces.*

We discuss singularity structure and deautonomization of the (p,q) -reduction of the ABS- Q_4 lattice equation. Also the action on the fibers of rational elliptic surfaces obtained by blowing ups is analyzed. Reductions and deautonomisations of Q_3 and Q_2 lattice equations are studied as well, showing the linearisable character of the corresponding mappings. (Received September 16, 2011)