¨a
toric
hy-
per-
käh-
ler
man-
i-
folds
?
va-
ri-
eties
?
ä
ä
man-
i-
fold
(M, g)
J_1, J_2, J_3
$_1(v, w) = g(J_1 v, w), _2(v, w) = (J_2 v, w), _3(v, w) = g(J_3 v, w),$
(g, J_i, w_i)
M
$i =$
$1, 2, 3$
$_2+$
$\sqrt{-1}_3$
J_1
holo-
mor-
phic
sym-
plec-
tic
J_1
$\vdots =_1$
$\vdots =_2$
$+\sqrt{-1}_3$
G
M
hy-
per-
hamil-
to-
nian
G
$\mu_{HK} := \mu \oplus \mu \longrightarrow g^* \oplus g^*.$
quo-
tient
?
M
G
μ_1, μ_2, μ_3
$\xi =$
$\xi \oplus$
ξ
μ_{HK}
G
$\mu_{HK}^{-1}(\xi)/G$
$M =$
$M_\xi G :=$
$\mu_{HK}^{-1}(\xi)/G$
ξ
ξ
ξ
ξ
$\mu_{HK}^{-1}(\xi)$
G
$\mu_{HK}^{-1}(\xi)$
orb-
ifold
M
$M =$
T^{*n}
G
T^{*n}
G
n
$\mu :^n \rightarrow$
g^*
n
T^{*n}
J_1
n
i
J_1
T^{*n}
T^{*n}
n
$(^n)^*$
$=$
$d\eta$
η
T^{*n}
G
n