70. 628418 2 114433

confined
extended

TJ-0-1.154,

$$\vec{H}_{eff} = \alpha \vec{m} \times (\vec{m} \times \vec{H}_{eff})$$

$$\vec{H}_{eff} = \nabla^2 \vec{m} + (h_0 + m_z)z, \quad (1)$$

$(\alpha >$
0 $)$ $\nabla^2 \vec{m},$

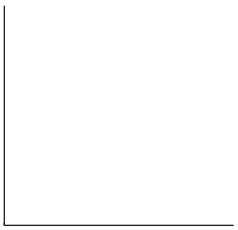
$h_0(\bar{x},t)z$ $m_z z$. C

H , -

$H > M$. T

L $|\gamma|\mu_0 M\ (Q - 1)$,

2.751 T T 0.662ET962G 1 Tf 6 0 0 6 0 TD (Š)T125F1 1 Tf =.664 0 TD 0 Tc 05H



300 E . (3)

$m_z = 0.5$. F

$\alpha = 0.01$, 3 μ

30 15- A 3.3-μ

. T 600 / .

$\alpha = 0.001$, 10 μ

70 10- A 10.3-μ .

$|\nabla h_0|/\alpha \ll 1$

T , $|\nabla h_0|/\alpha \ll 1$, -

. W

. F . 3, (3)

acceleration

0 . W

.

T

1D .[23]

W ,

(5). F E . (5) $\hat{P} = \hat{m} V + m \hat{V}$,

, E . (3) $\hat{P} < 0$

. T ($\hat{V} > 0$)

$$\hat{m} < \hat{P}/V < 0. \quad (6)$$

,

.

A F . 3( ) 3( ) ,

(6) $\omega > 0.3$. W $-1 < h_0 <$ 0,

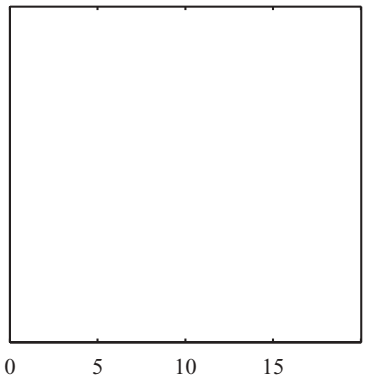
.

,

$(V,\omega) = (0,0)$

F . 3( ) *switching separatrix*. T

$(V,\omega) = (0, -h_0)$. L


0
5
10
15