??
$2\times$
2
d
$0 =$
$\{(x_1, x_2)^T \in_0$:
$x_1 \in$
$(-d, d)\}$
(x, y)
y
$d >$
0
$_d(x, y)$
$x, y \in^2_+$
$(x, y)\chi_{(-d,d)}$
0
$\chi_{(-d,d)}$
$\chi_{(-d,d)}$
$_d(x, y)e_j, j =$
$1, 2,$
$_e[_d(x, y)e_j]+^2$
$[_d(x, y)e_j] =$
$0^2_+,$
$_d(x, y)e_j =$
$\overline{[(x, y)e_j]}\chi_{(-d,d)0}., \in^2_+$
$_d(z, y)]_{ij} =$
$e_i\cdot$
$\overline{[_d(z, y)e_j]}$
$=$
$\int_0^d D(x, z)e_i\cdot$
$\overline{(x, y)}e_j ds(x), i, j =$
$1, 2, _d(z, y) =$
$\int_0^d D(x, z)^T\overline{(x, y)}ds(x).$
??
??
??
$d \to$
∞
$_d(z, y)$
$(x, y) \in^{2\times 2}$
$x, y \in^2_+$
$\int_0 D(x, z)^T\overline{(x, y)}ds(x).(z, y) =$
$\lim_{\to 0^+}\int_0 {}^{\omega(1+\imath)}_D(x, z)^T\overline{_{(1+\imath)}(x, y)}ds(x), {}^{\omega(1+\imath)}_D(x, z)q =$
$\sigma(_{(1+\imath\omega)}(x, z)q)e_2, \forall q \in^2$
??
??
??
$$\frac{}{2\pi\sum_{,\beta=p,s} p.v.\int\frac{(\xi)^T\overline{(\xi)}}{\delta(\xi)}e^{\imath(\mu_\alpha z_2-\overline{\mu}_\beta y_2)+\imath(y_1-z_1)\xi}d\xi-\frac{1}{2}\sum_{,\beta=p,s}\left[\frac{(\xi)^T\overline{(\xi)}}{\delta'(\xi)}e^{\imath(\mu_\alpha z_2-\overline{\mu}_\beta y_2)+\imath(y_1-z_1)\xi}\right]^{k_R}_{-k_R}.}(z, y) =$$
$\frac{1}{2\pi}\int_{-k_p}^{k_p}\frac{(\xi)^T\overline{(\xi)}}{\delta(\xi)}e^{\imath\mu_p(z_2-y_2)+\imath(y_1-z_1)\xi}d\xi$
$+$
$\frac{1}{2\pi}\int_{-k_s}^{k_s}\frac{(\xi)^T\overline{(\xi)}}{\delta(\xi)}e^{\imath\mu_s(z_2-y_2)+\imath(y_1-z_1)\xi}d\xi.$
Ω
$h =$
(Ω, Γ_0)
Ω
Γ_0
$0 <$
$c_1 <$
$1, c_2 >$
0
$_1| \le$
$c_1 d, |x-$
$y| \le$
$c_2 h, \forall x, y \in$
$\Omega._0$
$k_s h \gg$
1
(z, y)
$_d(z, y)$
$d \to$
∞
$_d(z, y)$
(z, y)
(h/d)
$k_s h \ge$
1
$d \gg$
h
$z, y \in$
Ω
$_d(z, y)|+$
$k_s^{-1}|\nabla_y((z, y)-_d$
$(z, y))|$