```
\begin{array}{l} \frac{1}{\mu g_{k_s}(x,y) + \frac{1}{2} \nabla \nabla (g_{k_s}(x,y) - g_{k_p}(x,y)) g_k = \frac{1}{4} H_0^{(1)}(k|x-y|)} Helmholtz \cite{10} (t) \\ \frac{1}{2} \\ \frac{1}{2
                             y \in \mathbb{R}^2
                   \begin{array}{l} y \in_+ \\ (x,y) \\ q \in^2 \\ \Delta_e[(x;y)q] + \\ \omega^2[(x,y)q] = \\ -\delta_y(x)q_+^2, \\ \sigma((x,y)q)e_2 = \\ 0\Gamma_0, (\ref{eq:continuous}, \ref{eq:continuous}, \ref{eq:continuous} \\ x_1 \end{array}
                                  (\xi, x_2; y_2) =
                                  \int_{(}^{\cdot}x_{1},x_{2};y)e^{-\imath(x_{1}-y_{1})\xi}dx_{1},\forall\xi\in
              \begin{array}{l} f(x_1,x_2,y_3) \\ f(\xi,x_2;y_2) = \\ f(\xi,x_2;y_2) + \\ f(\xi,x_2;y_2) \\ f(\xi,x_2;y_2) = \\ f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \xi \frac{x_2 - y_2}{|x_2 - y_2|} \left( \frac{\xi^2}{\mu_s} \right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 e^{i\mu_s|x_2-y_2|},

\left(-\xi \frac{x_2 - y_2}{|x_2 - y_2|}\right)

                   \begin{array}{l} {\hat{p}}(\xi,x_2;y_2) = \\ \frac{1}{2\omega^2} \left( \begin{array}{c} \frac{\xi^2}{\mu_p} & \xi \frac{x_2 - y_2}{|x_2 - y_2|} \\ \xi \frac{x_2 - y_2}{|x_2 - y_2|} & \mu_p \end{array} \right) \end{array}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  e^{{\scriptscriptstyle 1}\mu_p|x_2-y_2|}.\mu_\alpha =
                   \begin{cases} k_{\alpha}^{2} - \frac{y_{2}}{|x_{2} - y_{2}|} \\ (k_{\alpha}^{2} - \frac{\xi^{2}}{|x_{2} - y_{2}|}) \\ k_{p} = \frac{\xi^{2}}{k_{p}} \\ \omega / \sqrt{\mu}, k_{s} = \frac{\omega}{\sqrt{\mu}}, k_{s
                                  c(x,y) =
                                       (x,y)-
                    \begin{aligned} &(x,y) - \\ &((x,y') - \\ &(x,y')_1, -y_2) \\ &x_1????_c(x,y) \\ &\Delta_e[_c(x;y)q] + \\ &\omega^2[_c(x,y)q] = \\ &0_+^2, \\ &\sigma(_c(x,y)q)e_2 = \\ &-\sigma((x,y) - \end{aligned} 
                   \begin{array}{l} \sigma(_{c}(x,y)q)e_{2}\\ -\sigma((x,y)-\\ (x,y'))\Gamma_{0},\in\\ C\backslash\{0\}\\ z^{1/2}\sqrt{z}\\ \Im(z^{1/2})\geq\\ 0z=\\ z_{1}+\\ iz_{2}\\ z_{1},z_{2}\in \end{array}
                             z_1, z_2 \in 1/2 = 1/2
                             sgn(z_2)\sqrt{rac{|z|+z_1}{2}}+
                   1\sqrt{\frac{|z|-z_1}{2}}, \forall z \in \begin{bmatrix} -1/2 \\ 0 \end{bmatrix}
(z+\frac{1/2}{2})
                        (z + 1)^{1/2}
(z - 1)^{1/2}
                        \frac{????x_2}{\mu \frac{d^2(e_1^T c \hat{q})}{dx_2^2}} +
                             1(\lambda +
         \mu \xi \frac{d(e_2^T \hat{q})}{dx_2} + (\omega^2 - \xi)^2
                                  (\lambda +
```

 $(2u)\xi^2(e^T,q) = 0(1+2u)d^2(e^T_2\hat{q}) + 1(1+u)\xi d(e^T_1\hat{q}) + (u^2-u\xi^2)(e^T,q) = 0$