

1059-35-41

J A Barceló, **M Folch-Gabayet** and **S Pérez-Esteve*** (salvador@matcuer.unam.mx),
Instituto de Matemáticas Unidad Cuernavaca, Av Universidad s/n, Lomas de Chamilpa, 62251
Cuernavaca, Morelos, Mexico, and **A Ruíz** and **M C Vilela**. *Estimates for the resolvent of the
spectral Navier operator*. Preliminary report.

Consider the *spectral Navier operator* $L\mathbf{u}(x) = \Delta^*\mathbf{u}(x) + \omega^2\mathbf{u}(x)$, where $\omega > 0$, $x \in \mathbb{R}^n$, $n \geq 2$,

$$\Delta^*\mathbf{u} = \mu\Delta I\mathbf{u} + (\lambda + \mu)\nabla\text{div } \mathbf{u},$$

ΔI denotes the diagonal matrix with the Laplace operator on the diagonal, \mathbf{u} is a vector-valued function from \mathbb{R}^n to \mathbb{C}^n , and λ, μ are the Lamé constants. We study limiting absorption principles for this operator and extending known results for the Helmholtz equation we give estimates for the resolvent. (Received February 08, 2010)