procedure CONJUGATE GRADIENT
    Guess Initial μ
    $r = E - \tilde{T}\mu$
    $p = Mr$
    while not converged **do**
        $\gamma \leftarrow rMr/p\tilde{T}p$
        $\mu \leftarrow \mu + \gamma p$
        $r_1 \leftarrow r - \gamma\tilde{T}p$
        $\beta \leftarrow r_1 M r_1 / rMr$ (Previous r is used here.)
        $p \leftarrow Mr_1 + \beta p$
        Check Convergence
    end while
end procedure