

1 List of solutions to Laplace's Equation

1. Cartesian Coordinates
2. Cylindrical Coordinates
 - (a) z -independent
 - i. ρ -periodic
 - ii. ρ -decaying
 - A. ϕ -independent, $\mathbf{K} = \mathbf{0}$
 - B. ϕ -periodic, $\mathbf{K} = K_0 \sin(n\phi + \alpha_n)$
 - (b) z -periodic
 - (c) z -decaying
3. Spherical Coordinates

2 Linear Combinations