Boundary	Elliptic	Hyperbolic	Parabolic
Condition	(Poisson Equation)	(Wave Equation)	(Heat Equation)
Dirichlet open surface	Underspecified	Underspecified	Unique & stable (1-D)
Dirichlet closed surface	Unique & stable	Overspecified	Overspecified
Neumann open surface	Underspecified	Underspecified	Unique & Stable (1-D)
Neumann closed surface	Unique & stable	Overspecified	Overspecified
Cauchy open surface	Nonphysical	Unique & stable	Overspecified
Cauchy closed surface	Overspecified	Overspecified	Overspecified