

## CHAPTER OVERVIEW

### 11: Green's Functions

A **Green's function** is a solution to an inhomogenous differential equation with a “driving term” that is a delta function (see Section 10.7). It provides a convenient method for solving more complicated inhomogenous differential equations. In physics, Green's functions methods are used to describe a wide range of physical phenomena, such as the response of mechanical systems to impacts or the emission of sound waves from acoustic sources.

[11.1: The Driven Harmonic Oscillator](#)

[11.2: Space-Time Green's Functions](#)

[11.3: Causality and the Time-Domain Green's Function](#)

[11.4: Looking Ahead](#)

[11.5: Exercises](#)

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