1 Introduction

This little note introduces the basic concept of LaTeX, one of the world most popular typesetting languages.

2 The Basic

In Section 1, the overall structure of LaTeX was introduced, this section will focus on typesetting mathematical expression. Consider the following stochastic differential equation:

$$dX_t = \mu dt + \sigma dW_t \tag{1}$$

where dW_t denotes the standard Wiener process. This equation has the equivalent form:

$$X_t = X_0 + \mu + \sigma \int_0^t dW_s ds. \tag{2}$$

Equation (2) is often called the integral form of stochastic Equation (1).