# (listing set to text only)

# Part II Listing

Listing 1 is what might be needed to replicate the code within subsequent listings. Check the documentation portion of the source file, ccool.dtx, for exhaustive settings.

# Listing 1.

- % \usepackage{amsmath, amsthm, commath}
- % \usepackage[T1]{fontenc}% \char`[
- %

### Listing 2.

- x @ y
- x % y @ z
- x & y
- x & y
- x & y & z
- x, y & z
- x, y & z

### Listing 3.

 $\{H\}.\{e\}.\{l\}.\{o\}, [world!]$ 

### Listing 4.

 $\{H\}.\{e\}.\{l\}.\{o\}, [world!]$ 

### Listing 5.

We call  $\omega_1, \ldots, \omega_n$  the elementary events, and

$$\Omega = (\omega_1, ..., \omega_n)$$

the sample space.

### Listing 6.

Let  $\{\Omega, \mathcal{F}, \mathcal{P}\}$  denote the probability space, where  $\mathcal{F} \subset 2^{\Omega}$ .

### Listing 7.

 $\Omega \mathcal{F} \mathcal{P}$ 

## Listing 8.

**Theorem 1 (Mittelwertsatz für** n **Variable)** Es sei  $n \in \mathbb{N}$ ,  $D \subseteq \mathbb{N}^n$  eine offene Menge und  $f \in C^1(D,\mathbb{R})$ . Dann gibt es auf jeder Strecke  $[x_0,x] \subset D$  einen Punkt  $\xi \in [x_0,x]$ , so dass gilt

$$\frac{f(x) - f(x_0)}{x - x_0} = \operatorname{grad} f(\xi)^{\top}$$

(Check:  $\xi$ )

Listing 9.

 $\mathbb{N} \mathbb{R} D C^1 [x_0, x]$