- e_j The $j^{
 m th}$ unit vector; a vector with one in the $j^{
 m th}$ component and zero in all other components.
- \mathbf{x}_{-j} The vector \mathbf{x} without the j^{th} component; that is, the vector $\mathbf{x}_{-j} = (x_1, \dots, x_{j-1}, x_{j+1}, \dots, x_n)$.
- C^1, C^2 The class of continuously differentiable functions on \Re^n ; the class of all twice-continuously differentiable functions on \Re^n .

Abbreviations

- a.s. Almost surely.
- **c.d.f.** Cumulative distribution function.
- i.i.d. Independent and identically distributed.
- **p.d.f.** Probability-density function.
- p.m.f. Probability mass function.