List of preferred symbols and notations

a_i	'Covariate function' in the generalized (non-) linear models [(4.5.2), (4.12.3)]
A_n	Design matrix in the generalized linear models [(4.5.5)]
B	Parameter space. Subset of finite-dimensional vector space [Section 2.2]
$\underline{B}_n(\delta)$	Relatively open neighbourhood of β_0 [(4.2.8)]
$\overline{B}_n(\delta)$	Relatively closed neighbourhood of β_0 [(4.2.9)]
$\mathbf{C}$	The complex numbers
$c, c(\beta)$	Constant in the mixed cumulant conditions [Theorem 2.4.2]
$\mathbf{D}$	The infinite sequence of log-likelihood differentials [Section 2.8]
$D_k(\beta)$	The kth log-likelihood differential at β [(2.2.1)]
$D_k^{(n)}(\beta)$	The kth log-likelihood differential at β for the nth model in a sequence [(4.2.2), (5.1.5)]
$D_{k,i}(\beta)$	The kth log-likelihood differential at β in the model for Y_i [(5.1.4)]
E	The sample space [Section 2.2]
$E^{(n)}$	The sample space for the nth model in a sequence [(4.2.1)]
$f(y;\beta)$	The density function in a model [Section 2.2]
$f^{(n)}(y^{(n)};\beta)$	The density function in the nth model in a sequence [(4.2.1), (5.1.3)]
$f_1(y;\beta)$	The density function in the model for Y_i in Chapter 5 [(5.1.1)]
$I(\beta)$	The Fisher information at β [(2.3.16)]
$I^{(n)}(\beta)$	The Fisher information at β for the nth model in a sequence [(4.2.4), (5.1.6)]
$\mathrm{Lin}(V;W)$	The class of linear mappings from V to W [Definition 1.1.1]
$\mathrm{Lin}_k(V;W)$	The class of k-linear mappings from V^k to W [Definition 1.1.2]
$\mathbf{N}$	The natural numbers
$N(\mu,\Gamma)$	The normal distribution with mean μ and variance Γ [Definition 4.2.2]
$\mathbf{R}$	The real numbers
$S_m(k)$	The set of sequences $(a_1,\ldots,a_m) \in \mathbf{N}^m$ with $\sum a_j = k$ [(1.2.24)]
$\mathrm{Sym}_k(V;W)$	The class of k-linear symmetric mappings from V^k to W [Definition 1.1.2]
$\mathbf{T}$	The infinite sequence of centered log-likelihood differentials [Section 2.8]
$T(k)$	The set of sequences $(a_1,\ldots,a_k) \in \mathbf{N}_0^k$ with $\sum ja_j = k$ [(1.2.23)]
$U_a(\beta_0)$	The a-distance neighbourhood of the parameter point β_0 [(2.3.1)]

$U_0(\beta_0)$	The neighbourhood of the parameter point β_0 from the definition of an analytic model [Definition 2.2.1]
$V, W, V_1, \ldots$	Finite-dimensional real vector spaces [Section 1.1]
Y, y	The random variable on the sample space E [Section 2.2]
$Y^{(n)}, y^{(n)}$	The random variable on the sample space $E^{(n)}$ for the nth model in a sequence [Section 4.2, Section 5.1]
β	Parameter in a statistical model [Section 2.2]
$\hat{\beta}_n(\delta)$	The local maximum likelihood estimator [Definition 4.3.2]
$\hat{\beta}_n(K)$	The maximum likelihood estimator within the set K [Section 5.4]
θ	Parameter in the generalized (non-) linear models [Section 4.5, Section 4.12]
Θ	Parameter space for the parameter θ [Section 4.5, Section 4.12]
$\boldsymbol{\theta}$	Parameter in the generated exponential family [Section 2.8]
$\boldsymbol{\Theta}$	The parameter space for the generated full exponential family [Section 2.8]
κ	Cumulant generating function [Definition 1.4.7]
κ_k	The kth cumulant of a random variable [Definition 1.4.3]
$\lambda, \lambda(\beta)$	Factor in the mixed cumulant conditions. The index of the model [Theorem 2.4.2, Definition 2.5.1]
$\lambda^{(n)}(\beta)$	The index of the nth model in a sequence [Section 4.2, (5.1.8)]
μ	Moment generating function [Definition 1.4.6]
μ_k	The kth moment of a random variable [Definition 1.4.1]
$\mu_{k_1 \cdots k_m}$	Moments of the log-likelihood differentials [(2.3.13)]
ν	Underlying measure on the sample space [Section 2.2]
$\nu^{(n)}$	Underlying measure on the sample space for the nth model in a sequence [(4.2.1)]
ξ	Characteristic function [Definition 1.4.2]
$\rho, \rho(\beta)$	Factor in the bound for the log-likelihood derivatives [Definition 2.2.1]
ϕ	Parameter in the generalized (non-) linear models [Section 4.5, (4.12.1)]
Φ	Parameter space for the parameter ϕ [Section 4.5, (4.12.1)]
$\Phi_{0,\Gamma}$	The measure for the normal distribution $N(0, \Gamma)$ [(5.2.6)]
$\chi_{k_1 \cdots k_m}$	Cumulants of the log-likelihood derivatives [(2.3.15)]
$\chi^{(n)}_{k_1 \cdots k_m}$	Cumulants of the log-likelihood derivatives for the nth model in a sequence [(4.2.3), (5.1.7)]
ψ	Parameter in the generalized (non-) linear models [Section 4.5, (4.12.1)]
Ψ	Parameter space for the parameter ψ [Section 4.5, (4.12.1)]
$\|\cdot\|_{I(\beta)}$	The Fisher information semi-norm [(2.5.2)]
$\|\cdot\|_n$	The Fisher information semi-norm from the nth model in a sequence [(4.2.5), (5.1.9)]
$[\cdot]_i$, etc.	Coordinate notation - the ith coordinate of a vector [(1.1.5)]