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INDEX OF SYMBOLS

General notation.

$A := B$	means that A is defined by B
$\overset{\circ}{A}$	interior of A . When A is a subset of \mathbb{R}^d this has the usual meaning. When A is an edge of a graph or an arc in \mathbb{R}^d we also use $\overset{\circ}{A}$ to denote A minus its endpoints.
$\text{Fr}(A)$	Topological boundary of A
\bar{A}	closure of A . If A is a Jordan curve in the plane we also use \bar{A} to denote $A \cup \text{int}(A)$.
∂A	boundary on a graph of a set A in the graph (see p.29).
$\partial_{\text{ext}} A$	exterior boundary on a graph of a set A in the graph (see p.387).
$\#A$	number of vertices in A (on rare occasions $\#A$ denotes the number of edges in A).
$A \setminus B$	the set of points in A but outside B .
ξ_i	i -th coordinate vector
$\bar{0}$	zero vector
$\bar{1}$	vector of all ones
$p_1 \gg p_2$	$p_1(i) > p_2(i)$, $1 \leq i \leq d$, for two d -vectors p_1 and p_2 .
$[a(1),b(1)] \times \dots \times [a(d),b(d)]$ $= \prod [a(i),b(i)]$	Cartesian product of the intervals $[a(i),b(i)]$, i.e., $\{x \in \mathbb{R}^d : a(i) \leq x(i) \leq b(i), 1 \leq i \leq d\}$.
$\{a\} \times [b(1),b(2)]$	the vertical line segment $\{x \in \mathbb{R}^2 : x(1) = a, b(1) \leq x(2) \leq b(2)\}$. $[b(1),b(2)] \times \{a\}$ denotes a horizontal line segment.
$a \wedge b$	$\min(a,b)$ for real numbers a, b
$a \vee b$	$\max(a,b)$ for real numbers a, b
$\lfloor a \rfloor$	largest integer $\leq a$
$\lceil a \rceil$	smallest integer $\geq a$
$v \text{ } \overset{\circ}{\text{G}} \text{ } w$	v and w are adjacent vertices on $\overset{\circ}{\text{G}}$
$///$	denotes the end of a Comment, Remark, or Problem.

Probability notation.

$I[E]$	indicator function of the event E
$P\{E\}$	probability of E

$P\{E F\}$	conditional probability of E , given F (for an event F)
$P\{E \mathfrak{F}\}$	conditional probability of E , given \mathfrak{F} (for a σ -field \mathfrak{F}).
$E\{X\}$	expectation of the random variable X with respect to P (subscripts on E correspond to the same subscripts on P).
$E\{X;F\}$	$E\{XI[F]\}$ = integral of X over F with respect to the probability measure
$E\{X F\}$	conditional expectation of X given F (for an event F)
$E\{X \mathfrak{F}\}$	conditional expectation of X given \mathfrak{F} (for a σ -field \mathfrak{F}).

Special symbols.

We list here the numbers of the pages where some symbols which are used in the same meaning throughout the book are defined.

$v_1 \text{ } \& \text{ } v_2$	10	G_{pl}	21
$r_1 \prec r_2$	35	G_{pl}^*	21
$\langle r, t, s \rangle$	301	$G(\omega; \text{occupied})$	244
$a(n, l)$	84	$G^*(\omega; \text{vacant})$	244
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B_n	7, 335	$\mathcal{H}_l, \mathcal{H}_r, \mathcal{H}^*$	305
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$\sigma(\bar{n};i,p) = \sigma(\bar{n};i,p,\mathcal{G})$	48
$\sigma^*(\bar{n};i,p) = \sigma^*(\bar{n};i,p,\mathcal{G})$	48
$\tau(\bar{n};i,p)$	82
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