2174 INDEX

Bézier spline, 247	upper triangular matrix, 222
Bézout identity, 1263	block diagonalization
back-substitution, 250	of a normal linear map, 620
Banach fixed point theorem, 1679	of a normal matrix, 629
Banach space, 362	of a skew-self-adjoint linear map, 624
barycenter, 792, 802, 839, 843	of a skew-symmetric matrix, 629
definition, 805	of an orthogonal linear map, 625
barycenter of a family of weighted points, 805	of an orthogonal matrix, 629
barycentric combination	boldface notation of vectors, 799
definition, 805	Boolean linear program, 1818
barycentric coordinates of $x$ w.r.t. an affine	bounded linear functional, 1658
frame	bounded linear operator, 1658
definition, 815	bounded subset, 1354
basis, 77, 792, 844	Boy surface, 903
dimension, 79, 83	Boyd and Vandenberghe, 1509, 1529, 1531
of $\overrightarrow{E}$ , 815	camera
projective, 868	calibration problem, 948
vector space, 814	extrinsic parameters, 948
basis associated with a projective frame, 868	intrinsic parameters, 948
basis pursuit, 1899	position and orientation, 948
ADMM form, 1899	projection matrix, 948
Beltrami, 739	reference frame, 947
Berger, 838	camera calibration
Bernstein polynomials, 77, 128, 245	and Cayley's formula, 942
Bessel inequality, 2115	projective geometry, 947
best $(d - k)$ -dimensional affine approxima-	cannonical isomorphism
tion, 781, 782	$\sharp \colon E^* \to E,  1146$
best affine approximation, 780	canonical
best approximation, 780	frame of $\mathbb{P}^1_K$ , 871
bidual, 101, 403	isomorphism, 452
bidual space, 930	projection, 861
bijection between $E$ and its dual $E^*$ , 452	canonical isomorphism
bijective affine maps, 826	$ b \colon E \to E^*, 1146 $
bijective linear maps, 826	definition, 1145
bilinear form, see bilinear map	canonical pairing, 408
bilinear map, 212, 408	evaluation at $v, 408$
canonical pairing, 408	Carathéodory's theorem, 817
definite, 440	Cartan, Elie, 955
positive, 440	Cartan–Dieudonné theorem, 626, 955, 966,
symmetric, 212	977
birapport, 912	affine isometries, 979
block	Euclidean case, 955