MATHEMATICAL ABBREVIATIONS

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Contents

1. Introduction

This is a document for mathematical abbreviations. See wiki for a more completed description. See also the mathematical jargons.

2. Jargons

c.f.	compare (as a reference)
WLOG	without loss of generality

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3. Mathematicians

AA	Arzelà–Ascoli
AB	Atiyah–Bott
AB	Auslander–Buchweitz
AF	Andreotti–Frankel
AG	Auslander–Gorenstein
AK	Ariki–Koike
AK	Ax–Katz
AL	Atkin–Lehner
ALW	Ax–Lindemann–Weierstrass
AM	Andreotti–Mayer
AO	André–Oort
AP	Abel–Prym
AR	Auslander–Reiten
AS	Artin–Schreier
AS	Atiyah–Singer
AS	Ax–Schanuel
AW	Alexander–Whitney
BB	Baily–Borel
BB	Barr–Beck
BB	Beauville–Bogomolov
BB	Beilinson–Bernstein
BBDG	Beilinson–Bernstein–Deligne–Gabber
BC	Banach–Colmez
BCH	Baker–Campbell–Hausdorff
BD	Breen–Deligne
BGG	Bernstein–Gelfand–Gelfand
BK	Bloch–Kato
BKK	Bernstein–Kushnirenko–Khovanskii
BL	Barth–Lefschetz
BL	Bernstein–Lunts
BL	Bombieri–Lang
BL	Borel–Lebesgue
BM	Blakers–Massey
BM	Borel–Moore
BM	Brauer–Manin
BMK	Riesz–Markov–Kakutani
BMS	Bhatt–Morrow–Scholze
BN	Brill–Noether
BN	Browder–Novikov
BP	Brieskorn–Grothendieck
BP	Brieskorn–Pham

BQ	Bloch–Quillen
BS	Banach–Steinhaus
BS	Banach–Stone
BS	Borel–Serre
BS	Bott–Samelson
BS	Brumer–Stark
BT	Banach–Tarski
BT	Barsotti–Tate
BT	Bruhat–Tits
BU	Borsuk–Ulam
BW	Bolzano–Weierstrass
BWB	Borel–Weil–Bott
CG	Clebsch–Gordan
CJ	Chen–Jiang
CKN	Caffarelli–Kohn–Nirenberg
CM	Castelnuovo–Mumford
CM	Chern–Mather
CM	Codazzi–Mainardi
CP	Cauchy–Pompeiu
CR	Cauchy–Riemann
CS	Cappell–Shaneson
CS	Cartan–Serre
CS	Cauchy–Schwarz
CS	Chern–Simons
CS	Clausen-Scholze
CS	Corlette–Simpson
CS	Cotlar–Stein
CV	Calderon–Vaillancourt
CW	Chevalley–Warning
CY	Calabi–Yau
DB	Deligne–Beilinson
DK	Dold–Kan
DL	Deligne–Lusztig
DM	Deligne–Mumford
DM	Dieudonné–Manin
DP	De Concini–Procesi
DP	Dold–Puppe
DR	DeBacker–-Reeder
DS	Deligne–Serre
DT	Dold–Thom
DT	Donaldson–Thomas

DUY	Donaldson–Uhlenbeck–Yau
DW	De Rham–Weil
DW	Dowling–Wilson
EH	Eckmann–Hilton
EH	Einstein–Hermitian
EK	Enriques–Kodaira
EL	Euler–Lagrange
EM	Eilenberg–MacLane
ES	Eichler–Shimura
ES	Eilenberg–Steenrod
ES	Eisenbud–Schreyer
ES	Eisenbud–Shamash
EW	Eilenberg–Watts
EZ	Eilenberg–Zilber
FD	Fourier–Deligne
FF	Fargues–Fontaine
FH	Fulton–Hansen
FJ	Fulton–Johnson
FK	Feynman–Kac
FL	Fontaine–Laffaille
FM	Fontaine–Mazur
FM	Fourier–Mellin
FM	Fourier–Mukai
FM	Freyd–Mitchell
FS	Fargues–Scholze
FS	Fourier–Sato
FS	Frobenius–Schur
FT	Farrell–Tate
FT	Feit–Thompson
FU	Fréchet–Urysohn
FW	Fontaine–Winterberger
GB	Gauss–Bonnet
GBC	Gauss–Bonnet–Chern
GC	Gauss–Codazzi
GGP	Gan–Gross–Prasad
GL	Genestier–Lafforgue
GL	Green–Lazarsfeld
GM	Gauss–Manin
GM	Goresky–MacPherson
GM	Grothendieck–Messing
GP	Gieseker–Petri

GP	Gross–Prasad
GS	Garcia–Sankaran
GS	Gelfond-Schneider
GS	Golod–Shafarevich
GS	Gram–Schmidt
GV	Gopakumar–Vafa
GV	Gromov–Witten
GW	Grunwald–Wang
GZ	Gross–Zagier
HB	Hahn–Banach
HB	Heine–Borel
HC	Hilbert–Chow
HJ	Hamilton–Jacobi
HL	Hardy–Littlewood
HLS	Hardy–Littlewood–Sobolev
HM	Hasse–Minkowski
HN	Harder–Narasimhan
HR	Hodge–Riemann
HS	Hartshorne–Serre
HS	Hitchin–Simpson
HT	Hodge–Tate
HW	Hasse–Weil
HZ	Hirzebruch–Zagier
JH	Jordan–Hölder
JM	Jacobson–Morozov
KA	Krull–Akizuki
KAM	Kolmogorov–Arnold–Moser
KH	Kobayashi–Hitchin
KL	Kazhdan–Lusztig
KL	Kubota–Leopoldt
KM	Kac–Moody
KN	Kulkarni–Nomizu
KR	Kudla–Rapoport
KS	Kashiwara–Schapira
KS	Kelvin–Stokes
KS	Kirby–Siebenmann
KS	Kodaira–Spencer
KS	Krull–Schmidt
KT	Kinoshita–Terasaka
KW	Kronecker–Weber
LH	Leray–Hirsch

LK	Langlands–Kottwitz		RM	Riesz–Markov
LM	Levi–Malcev		RMK	Riesz–Markov–Kakutani
LM	Lê–Milnor		RS	Rankin–Selberg
LO	Littlewood–Offord		RS	Riemann–Stieltjes
LR	Langlands–Rapoport		RT	Reshetikhin–Turaev
LR	Littlewood–Richardson		RT	Riesz–Thorin
LT	Langlands–Tunnell		RZ	Rapoport–Zink
LT	Lubin–Tate		SB	Severi–Brauer
LV	Lawrence–Venkatesh		SN	Skolem–Noether
LW	Lindemann–Weierstrass		SS	Schneider–Stuhler
LZ	Liu–Zheng		SS	Sobolev-Slobodeckij
LZ	Lu–Zheng		SS	Stanley–Stembridge
MA	Monge–Ampère		ST	Serre-Tate
ML	Mordell–Lang		SW	Schur–Weyl
MM	Manin–Mumford		SW	Shareshian–Wachs
MN	Milnor–Novikov		SW	Siegel–Weil
MP	Moore–Postnikov		SW	Spanier–Whitehead
MS	Merkurjev–Suslin		SW	Stiefel–Whitney
MS	Myers–Steenrod		SZ	Schur–Zassenhaus
MT	Mumford–Tate		SČ	Stone–Čech
MV	Mayer–Vietoris		TM	Thom–Mather
NN	Newlander–Nirenberg		TN	Tate–Nakayama
NP	Newton–Puiseux		TS	Thom–Sebastiani
NS	Narasimhan–Seshadri		TT	Tomita–Takesaki
NS	Navier-Stokes		TW	Taylor–Wiles
NS	Nielsen–Schreier		VB	Vietoris–Begle
NS	Nikolov–Segal		VC	Vapnik–Chervonenkis
NU	Neukirch–Uchida		WD	Weil–Deligne
NU	Neukirch–Uchida		WW	Wigner–Weyl
PB	Pierce–Birkhoff		YM	Yang–Mills
PH	Poincaré–Hopf		ZP	Zilber–Pink
PL	Phragmén–Lindelöf		ZR	Zariski–Riemann
PL	Poincare-Lefschetz		MMM	Morita–Miller–Mumford
PT	Pontryagin–Thom		BG	Birkhoff–Grothendieck
PT	Prym–Torelli		KZ	Knizhnik–Zamolodchikov
PV	Poincaré–Verdier		KM	Kashiwara–Malgrange
PW	Peter–Weyl		BB	Bloch–Beilinson
PW	Pila–Wilkie		GT	Galois–Teichmüller
RH	Riemann–Hurwitz		GT	Grothendieck–Teichmüller
RHW	Rota–Heron–Welsh		JT	Jacobi-Trudi
RK	Riemann–Kempf		BS	Bernstein–Sato

HK	Hyodo–Kato		
FM	Fontaine–Messing		

Remark 3.1. de Rham, Białynicki-Birula, Mittag-Leffler, and Levi-Civita are individuals, while Birch and Swinnerton-Dyer is not a trio.

Kollár, Shepherd-Barron, and Alexeev is not a quartet.

4. Subjects related

AG	analytic geometry
AG	algebraic geometry
AG	arithmetic geometry
CFT	continuous Fourier transform
CFT	class field theory
CFT	conformal field theory
DDG	discrete differential geometry
DG	differential geometry
DG	differential graded
DGA	differential graded algebra
DGLA	differential graded Lie algebra
DGS	differential graded sheaf
GMT	geometrical measure theory
LA	linear algebra
RT	representation theory

LLC	local langlands correspondence
GLC	global langlands correspondence
MMP	minimal model program
HoTT	homotopy type theory

5. Geometrical objects

EC	elliptic curve

MF	modular form
TVS	topological vector space
LCTVS	locally convex topological vector spaces
LF	limit of Fréchet spaces
IC	intersection complex
mHs	mixed Hodge structure
wps	weighted projective space
PS	Punkt un Strahl
PPAV	principally polarized abelian variety
PPTAV	principally polarized tropical abelian variety

6. OTHER MATH STUFFS

SC	Schanuel Conjecture
sc	supercuspidal
sc	superconformal
sc	semicontinuity
sc	simply connected
ss	supersingular
ss	semisimple
ss	semistable
ss	semistandard
FT	Fourier transform
HT	Hilbert transform
psh	plurisubharmonic
spsh	strictly plurisubharmonic
pscv	pseudoconvex
spcv	strictly pseudoconvex
CS	classical symbol
CS	computer science
CM	complex multiplication
Bl	block
Bl	blow up
SYT	standard Young diagram
ES	Euler system
PD	Poincaré duality
PL	piecewise linear
SNC	single normal crossing
CC	characteristic cycles
CC	cluster character
LMD	local Morse data

NMD	normal Morse data
MC	middle convolution
LSA	local stratified acyclicity
SMT	stratified Morse theory
CIT	conjecture on intersections with tori
eMZVs	elliptic multiple zeta values
GAFT	General Adjoint Functor Theorem
SAFT	Special Adjoint Functor Theorem
GV	generic vanishing
AHA	affine Hecke algebra
DAHA	double affine Hecke algebra

7. Other non-math stuffs

CSG	Constructive solid geometry

8. Universities

HU	Humboldt-Universität zu Berlin
TU	Technische Universität Berlin
FU	Freie Universität Berlin
BMS	Berlin Mathematical School

Berlin:

RTG	Research Training Groups
IMPRS	International Max Planck Research Schools
WIAS	Weierstrass Institute for Applied Analysis and Stochastics

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