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
AH	Appell–Humbert
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
BB	Bloch–Beilinson
BBDG	Beilinson–Bernstein–Deligne–Gabber
BC	Banach–Colmez
BCH	Baker–Campbell–Hausdorff
BD	Breen–Deligne
BG	Birkhoff–Grothendieck
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	Bernstein–Sato
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
CK	Cauchy–Kovalevskaya
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–Messing
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
GT	Galois–Teichmüller
GT	Grothendieck–Teichmüller
GV	Gopakumar–Vafa
GV	Gromov–Witten
GW	Grunwald–Wang
GZ	Gross–Zagier
HB	Hahn–Banach
HB	Heine–Borel
HC	Hilbert–Chow
HJ	Hamilton–Jacobi
HK	Hyodo–Kato
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
JT	Jacobi-Trudi
KA	Krull–Akizuki
KAM	Kolmogorov–Arnold–Moser
KH	Kobayashi–Hitchin
KL	Kazhdan–Lusztig
KL	Kempf–Laksov
KL	Kubota–Leopoldt

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

WD	Weil–Deligne
WW	Wigner–Weyl
YM	Yang–Mills
ZP	Zilber–Pink
ZR	Zariski–Riemann
RR	Riemann–Roch
AB	Auslander–Buchsbaum
FS	Fubini–Study
CM	Cohen–Macaulay

GN	Gordan–Noether

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
SAGA	standard Artinian Gorenstein 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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