

MATHEMATICAL ABBREVIATIONS

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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 | Auslander–Buchweitz |
| AF | Andreotti–Frankel |
| AG | Auslander–Gorenstein |
| AK | Ariki–Koike |
| AK | Ax–Katz |
| AL | Atkin–Lehner |
| ALW | Ax–Lindemann–Weierstrass |
| AO | André–Oort |
| 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 | 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 | 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 | Codazzi–Mainardi |
| CP | Cauchy–Pompeiu |
| CR | Cauchy–Riemann |
| CS | Cappell–Shaneson |
| CS | Cartan–Serre |
| CS | Cauchy–Schwarz |
| CS | Clausen–Scholze |
| 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 |
| DS | Deligne–Serre |
| DT | Dold–Thom |
| DT | Donaldson–Thomas |
| DW | De Rham–Weil |
| DW | Dowling–Wilson |
| EH | Eckmann–Hilton |
| EK | Enriques–Kodaira |
| EL | Euler–Lagrange |
| EM | Eilenberg–MacLane |
| ES | Eichler–Shimura |
| ES | Eilenberg–Steenrod |
| ES | Eisenbud–Shamash |

| | |
|-----|--------------------------|
| EW | Eilenberg–Watts |
| EZ | Eilenberg–Zilber |
| FD | Fourier–Deligne |
| FF | Fargues–Fontaine |
| 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 |
| GC | Gauss–Codazzi |
| GGP | Gan–Gross–Prasad |
| GL | Green–Lazarsfeld |
| GM | Gauss–Manin |
| GM | Goresky–MacPherson |
| GM | Grothendieck–Messing |
| GP | Gross–Prasad |
| GP | Gross–Prasad |
| GS | Garcia–Sankaran |
| GS | Golod–Shafarevich |
| GS | Gram–Schmidt |
| GV | Gopakumar–Vafa |
| GV | Gromov–Witten |
| GW | Grunwald–Wang |
| GZ | Gross–Zagier |
| HB | Hahn–Banach |
| HB | Heine–Borel |
| HJ | Hamilton–Jacobi |
| HL | Hardy–Littlewood |
| HLS | Hardy–Littlewood–Sobolev |
| HM | Hasse–Minkowski |
| HN | Harder–Narasimhan |
| HR | Hodge–Riemann |

| | |
|-----|-------------------------|
| 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 |
| LM | Levi–Malcev |
| LM | Lê–Milnor |
| LO | Littlewood–Offord |
| LR | Langlands–Rapoport |
| 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 |
| MN | Milnor–Novikov |
| MP | Moore–Postnikov |
| MS | Merkurjev–Suslin |
| MS | Myers–Steenrod |
| MT | Mumford–Tate |
| MV | Mayer–Vietoris |

| | | | |
|-----|-----------------------|----|---------------------|
| NN | Newlander–Nirenberg | SS | Sobolev-Slobodeckij |
| NP | Newton–Puiseux | SS | Stanley–Stembridge |
| NS | Navier–Stokes | ST | Serre–Tate |
| NS | Nielsen–Schreier | SW | Schur–Weyl |
| NS | Nikolov–Segal | SW | Shareshian–Wachs |
| NU | Neukirch–Uchida | SW | Siegel–Weil |
| NU | Neukirch–Uchida | SW | Spanier–Whitehead |
| PH | Poincaré–Hopf | SW | Stiefel–Whitney |
| PL | Phragmén–Lindelöf | SZ | Schur–Zassenhaus |
| PL | Poincaré–Lefschetz | SČ | Stone–Čech |
| PT | Pontryagin–Thom | TM | Thom–Mather |
| PV | Poincaré–Verdier | TN | Tate–Nakayama |
| PW | Peter–Weyl | TS | Thom–Sebastiani |
| PW | Pila–Wilkie | TT | Tomita–Takesaki |
| RH | Riemann–Hurwitz | TW | Taylor–Wiles |
| RHW | Rota–Heron–Welsh | VB | Vietoris–Begle |
| RM | Riesz–Markov | VC | Vapnik–Chervonenkis |
| RMK | Riesz–Markov–Kakutani | WD | Weil–Deligne |
| RS | Rankin–Selberg | WW | Wigner–Weyl |
| RS | Riemann–Stieltjes | YM | Yang–Mills |
| RT | Reshetikhin–Turaev | ZP | Zilber–Pink |
| RT | Riesz–Thorin | ZR | Zariski–Riemann |
| RZ | Rapoport–Zink | | |
| SB | Severi–Brauer | | |
| SN | Skolem–Noether | | |
| SS | Schneider–Stuhler | | |

Remark 3.1. 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 |
| DGS | differential graded sheaf |

| | |
|-----|----------------------------|
| GMT | geometrical measure theory |
| LA | linear algebra |
| RT | representation theory |
| | |
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| | |
|------|---------------------------------|
| LLC | local langlands correspondence |
| GLC | global langlands correspondence |
| MMP | minimal model program |
| HoTT | homotopy type theory |
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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 |

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 |
| | |

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 |
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Berlin:

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

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