Mathematical Acronyms

Below are brief explanations of some commonly occurring mathematical acronyms. Most these are familiar and current in professional mathematics but it is considered bad practice to use them in print. Many acronyms are only understood in context: you can say "GCD" and be fairly confident of being understood, but you would not use "glb" without explanation except in the context of mathematical analysis.

Acronyms for names of mathematical organisations, events etc are not included but may be found elsewhere, e.g. www.ams.org/mathweb/mi-acronyms.html or www.aamt.edu.au/Documentation/Acronyms. Acronyms which are used as mathematical symbols are omitted (e.g. GF for Galois Field) but may be included in my list of mathematical symbols.

I would be very happy to include suggestions by other people. The list has an unfortunate anglophile bias. If anyone wants to contribute mathematical acronyms in other languages (or can suggest links to lists of such) I would be very pleased.

Acromyn	Meaning	Comments
4CT	Four Colour Theorem	context=combinatorics. See 4CT at TotD
a.e.	almost everywhere	i.e. except for the members of a set of measure zero
BLUE	best linear unbiased estimator	context=statistics
CFSG	the classification of the finite simple groups	may appear in parentheses after the word 'theorem' to indicate that the only known proof relies on the classification.
CLT	Central Limit Theorem	context=statistics, probability theory. See CLT at TotD
CRT	Chinese Remainder Theorem	context=number theory. See CRT at TotD

Acronym	Meaning	Comments
DFT	Discrete Fourier transform	context=FFT, information theory
DPRM	Davis, Putnam, Robinson, Matiyasevich	context=Hilbert's problems, number theory, logic. See DPRM Theorem at TotD.
egf	exponential generating function	context=combinatorics
FLT	Fermat's Last Theorem	context=number theory
FFT	Fast Fourier transform	generally understood
GCD	Greatest Common Divisor	e.g. GCD(15,24)=3
gf	generating function	context=combinatorics
glb	greatest lower bound	context=mathematical analysis
iff	if and only if	generally understood, synonymous with $\Leftrightarrow$
ILP	Integer Linear Programme (or Programming)	context=operations research
i.u.a.r.	independently uniformly at random	refers to sampling from uniform distribution
lcm	least common multiple	e.g. lcm(15,24)=120
LHS	Left-hand side	e.g., of an equation
LP	Linear Programme (or Programming)	context=operations research
lub	least upper bound	context=mathematical analysis
NP	non-deterministic polynomial time	context=computer science, logic. See Cook's Theorem at TotD

Acronym	Meaning	Comments
p.d.f.	probability density function	context=probability
p.i.d.	principal ideal domain	context=algebra (ring theory)
Q.E.D.	quod erat demonstrandum	marks end of proof, nowadays more commonly denoted by the 'Halmos box' □. See Euclid's Triangular Prism at TotD
RHS	right-hand side	e.g., of an equation
r.t.p.	remains to prove	the task of proving something has been reduced to a smaller task
STS	Steiner Triple System	context=combinatorics, statistical design. See Design of the Century at TotD
TSP	Travelling Salesman Problem	context=combinatorics, operations research. See The BHH Theorem at TotD
t.f.a.e	the following are equivalent	usually used in theorem statements. See The Cameron–Fon-Der-Flaass IBIS Theorem at TotD
TotD	Theorem of the Day	
u.i.a.r.	see i.u.a.r.	
w.l.o.g	without loss of generality	used in proofs