

HYPERNUMBERS AND OTHER EXOTIC STUFF



(1) MORE ON THE "ARITHMETICAL" SIDE

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<https://arxiv.org/pdf/1006.3034.pdf> (see section "6. Tropical addition of complex numbers")

Supertropical quadratic forms II: Tropical trigonometry and applications - Zur Izhakian, Manfred Knebusch and Louis Rowen

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Fernando Guilherme and Silvano Lobo Pimentel

https://www.researchgate.net/publication/258241283_Zero_Displacement_Ternary_Number_System_the_most_economical_way_of_representing_numbers

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Multiple-Base Number System: Theory and Applications - Vassil Dimitrov, Graham Jullien, and Roberto Muscedere

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<https://www.cse.unt.edu/~tarau/research/2014/HBinX.pdf>

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<https://www.amazon.com/History-Mathematical-Notations-Dover-Mathematics/dp/0486677664>
The Words of Mathematics : An Etymological Dictionary of Mathematical Terms used in English - Steven Schwartzman
<https://www.amazon.com/Words-Mathematics-Etymological-Dictionary-Mathematical/dp/0883855119>

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<http://fs.unm.edu/SN/TheGeneralizedGolden.pdf>

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https://www.researchgate.net/publication/220368828_Computing_with_Exact_Real_Numbers_in_a_Radix-r_System

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Africa and Mathematics From Colonial Findings Back to the Ishango Rods - Dirk Huylebrouck

<https://www.amazon.co.uk/Africa-Mathematics-Colonial-Findings-Ishango/dp/3030040364>

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Emojitocode (code learning with emojis) - <https://www.emojicode.org/> && Emojipedia - <https://emojipedia.org/>

The Book of Human Emotions: From Ambigophobia to Umpty 154 Words from Around the World for How We Feel - Tiffany Watt Smith

<https://www.amazon.com/Book-Human-Emotions-Ambigophobia-Around/dp/0316265403>

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<https://www.amazon.com/Encyclopedia-Distances-Michel-Marie-Deza/dp/3662443414>

Digital Proxemics How Technology Shapes the Ways We Move - John A. McArthur

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<https://www.amazon.com/Talking-Troubles-Conversation-Foundations-Interaction/dp/0199937346>

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<https://www.amazon.com/Repairing-Broken-Surface-Talk-Understanding/dp/0190697962>

Spectrogram - <https://en.wikipedia.org/wiki/Spectrogram>

Phonological hierarchy - https://en.wikipedia.org/wiki/Phonological_hierarchy

Prosogram - <https://sites.google.com/site/prosogram/home>

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Laban notation - <https://en.wikipedia.org/wiki/Labanotation>

Knust's Dictionary of Kinetography Laban - <https://knustdict.netlify.app/entries>

A Compiler for 3D Machine Knitting - <https://la.disneyresearch.com/wp-content/uploads/A-Compiler-for-3D-Machine-Knitting-Paper.pdf>

Algoritmo del cortejo humano, heterosociabilidad y diálogo venusiano

MAX-VA-CUA-RO Secuenciado - Equipo de Seducción Científica - <https://dinamicassociales.com/>

Las 3 C's y macrohabilidades del Δ Helio - Equipo de Psicología Heterosocial - <https://www.egolandseducacion.com/>

Genealogical numbering systems - https://en.wikipedia.org/wiki/Genealogical_numbering_systems

Symbols and diagrams of the Family Tree - <https://en.wikipedia.org/wiki/Genogram#Symbols>

Six basic patterns of kinship - https://en.wikipedia.org/wiki/Kinship_terminology#Six_basic_patterns_of_kinship

WikiTree (a wiki for genealogists) - <https://www.wikitree.com/>

Reading fluids circuit diagrams : hydraulic & pneumatic symbols

<https://www.valmet.com/media/articles/up-and-running/reliability/FRFluidDwgs1/>

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<https://www.festo-didactic.com/ov3/media/customers/1100/00525179001075223667.pdf>

A Primer on Basic on Basic Hydraulic and Pneumatic Symbols

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Crash Course in Quantum Computing Using Very Colorful Diagrams - Rishabh Anand

<https://towardsdatascience.com/quantum-computing-with-colorful-diagrams-8f7861cfb6da>

Demystifying Quantum Gates One Qubit At A Time - Jason Roell

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Erdős number - https://en.wikipedia.org/wiki/Erd%C5%91s_number

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Xenharmonic (a wiki about musical tuning) - <https://en.xen.wiki/>

The Topos of Music III: Gestures Musical Multiverse Ontologies - Guerino Mazzola, René Guitart, Jocelyn Ho, Alex Lubet, Maria

Mannone, Matt Rahaim and Florian Thalmann - (see chapter 'Gesture and Vocalization' and 'Elements of a Future Vocal Gesture Theory')

<https://www.amazon.com/Topos-Music-III-Multiverse-Computational/dp/3319644793>

Sonic Possible Worlds Hearing the Continuum of Sound - Salom Voegelin

<https://www.amazon.ca/Sonic-Possible-Worlds-Revised-Continuum/dp/1501367617>

Sound, Music, Affect Theorizing Sonic Experience - Marie Thompson and Ian Biddle (Editors)

<https://www.amazon.com/Sound-Music-Affect-Theorizing-Experience/dp/144111467X>

How Channa Horwitz Permeated LA's 1960s Art Scene

<https://www.anothermag.com/art-photography/8576/how-channa-horwitz-permeated-las-1960s-art-scene>

Graphic scores - https://imslp.org/wiki/Category:Graphic_scores (unconventional, graphic, aleatoric or indeterminate notation)

Universal Script - Matthew DeBlock - <http://www.dsript.org/> (Uscript is universal logographic language based on math and physics)
Këlen Ceremonial Interlace Alphabet - <https://www.terjemar.net/kelen/lajathin.php>
Nato phonetic alphabet - https://en.wikipedia.org/wiki/NATO_phonetic_alphabet Q-code https://en.wikipedia.org/wiki/Q_code

Cookbook:Units of measurement - https://en.wikibooks.org/wiki/Cookbook:Units_of_measurement
Mateschef: Un sofrito de números y formas para chefs y gourmets - Claudi Alsina
<https://www.amazon.com/Mateschef-sofrito-n%C3%BAmoros-formas-gourmets/dp/8434422719>

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(an exotic grammar obtained after squashing an assembly programmer against a judge)
https://en.wikipedia.org/wiki/David_Wynn_Miller#Constructed_language_and_linguistic_theories
<https://github.com/lismore/MathematicalInterfaceForLanguage/blob/master/README.md>
: Russell-Jay: Gould. - <https://www.youtube.com/channel/UC2FPVSe66WpLdfoiQem4FzA/videos>
:QUANTUM-GRAMMAR-CHANNEL: - <https://www.youtube.com/c/QUANTUMGRAMMARCHANNEL/videos>
The Language of Crime and Deviance - Andrea Mayr and David Machin
<https://www.amazon.com/Language-Crime-Deviance-Introduction-Linguistic/dp/144110240X>

Neuro-optometry - Deborah G Zelinsky - <https://mindeye.com/research/>
Pen and paper exercises - Donalee Markus - <https://www.designsforstrongminds.com/paper-exercises>
The Neuroplasticity Alliance - <https://www.youtube.com/@neuroplasticityalliance/>
Conference for the American Optometric Association - Clark Elliott - <https://www.youtube.com/watch?v=LXCoOqSLYWw>
Parents with Autism: Neuroplasticity in Action - <https://www.youtube.com/watch?v=Ak7A6cMrrQM>

Lin4Neuro (neuroimaging) - https://www.nemotos.net/?page_id=29
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Innumeracy - https://en.wikipedia.org/wiki/Innumeracy_%28book%29
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Tripolar Coordinates (straight Line and Circle): Concurrency of Lines Joining Vertices of a Triangle to Opposite Vertices of Triangles on

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Geometry of the 3D Pythagoras' Theorem - <https://www.youtube.com/watch?v=QWPuPX5DHHI>
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Fermat's Theorem – a Geometrical View
https://www.researchgate.net/profile/Luis-Teia/publication/312607399_Fermat's_Theorem_-_a_Geometrical_View/links/58863f6d92851c21ff4d5825/Fermats-Theorem-a-Geometrical-View.pdf

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Extended Pythagoras Theorem using Triangles, and its Applications to Engineering - Luis Teia
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https://www.principlesofnature.com/number_geometry_connections/new_angles_on_triangles_and_theorems_the_eutrigon_theorem.htm
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<https://math.stackexchange.com/questions/1861635/tetrahedral-coordinates-in-space-generalization-of-hexagonal-coordinates>
Topology Optimization with Tetra-kai-decahedra and Spheroidal Masks - Nikhil Singh and Anupam Saxena
https://www.researchgate.net/publication/358345870_Topology_Optimization_with_Tetra-kai-decahedra_and_Spheroidal_Masks

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<https://www.youtube.com/watch?v=L24GzTaOII0>

How Does One Cut a Triangle? - Alexander Soifer - <https://www.amazon.com/How-Does-One-Cut-Triangle/dp/0387746501>

(6) SOFTWARE ZONE

DATA STRUCTURES*

Treesheet (tree-like spreadsheet) - <http://strlen.com/treesheets/>
Blockchain (demo) - <https://andersbrownworth.com/blockchain/>
Heimer (mind map) - <https://github.com/juzzlin/Heimer>
DAS-UI <https://das-ui.firebaseio.com/> && <https://szymonkaliski.com/writing/2017-09-08-building-das-ui/>
Enso (diagrammatic coding) - <https://enso.org/language>
Orca (procedural sequencers) - <https://github.com/Hundredrabbits/Orca>
Taichi (spatially sparse multi-level data structures) - <https://github.com/taichi-dev/taichi>
Rasdaman (datacube and arrays) - <http://www.rasdaman.org/wiki>
Categorical Data (data-related tasks using category theory) - <https://www.categoricaldata.net/>
Egison (efficient non-linear pattern matching with backtracking for non-free data type) - <https://www.egison.org/>
Eve (uniform data-processing) - <http://witheve.com/>
Habit (type-level programming) - <https://www.habit-lang.org/>
Fluidinfo (columnar shareable data) - <https://github.com/fluidinfo> && <https://en.wikipedia.org/wiki/Fluidinfo>
MentDB (world wide Data) - https://www.mentdb.org/mentdb_weak.html
Obsidian (knowledge base on top of your local folder of plain text files) - <https://obsidian.md/>
LMQL (query language for large language models) - <https://github.com/eth-sri/lmql>
Koka (effect typing, effect handlers, Perceus memory management) - <https://koka-lang.github.io/koka/doc/book.html#why>
NewLang (computing tensors and rational numbers) - <https://github.com/rsashka/newlang>
Odin (data-oriented programming)- <https://odin-lang.org/>
Cairo (provable programs and nondeterministic jumps) - https://www.cairo-lang.org/docs/how_cairo_works/cairo_intro.html
Primecoin - <https://en.wikipedia.org/wiki/Primecoin> && <https://primecoin.io/>

STRUCTS* WITH META

Bedrock (meta-distro) <https://bedrocklinux.org/>
Funtoo (meta-distro) - <https://www.funtoo.org/Welcome>
T2 System Development Environment (meta-distro) - <https://t2sde.org/index.cgi/>
DL Linux (meta-meta-distro) - <https://web.archive.org/web/20181221164035/https://www.sudosatirical.com/articles/dl-linux-0-0-1-released/>
Black (reflective) - <http://pllab.is.ocha.ac.jp/~asai/Black/>
Terra (meta-programming) - <http://terralang.org/>
MetaL (meta-language) - <https://www.meta-language.net/faq.html#what>
Rinci (metadata specifications) - <https://metacpan.org/pod/Rinci#ABSTRACT>
Circle (meta-programming) - <https://www.circle-lang.org/>
Hackett (meta-programming) - <https://lexi-lambda.github.io/hackett/>
Elena (polymorphic code) - <https://github.com/ELENA-LANG/elena-lang/wiki/ELENA-Programming-Manual#overview>
Beluga (mechanizing meta-theory) - <https://www.cs.mcgill.ca/~complogic/beluga/index.html>
Hazel (incomplete programs) - <https://hazel.org/>

Autohotkey (gui and scripting automation for windows) - <https://www.autohotkey.com/>
Rosie Pattern (beyond regex) - <https://rosie-lang.org/about/>
Antipurity (self-aware interpreter) - <https://github.com/Antipurity/conceptual>
Multicompiler (defensive compiler) - <https://immunant.com/blog/2018/09/multicompiler/>
Avail (articulate programming) - <https://www.availang.org/about-avail/introduction/index.html>
Push (evolutionary computing) - <https://faculty.hampshire.edu/lspector/push.html>
Wyvern (built-in skill for large-scale design) - <https://wyvernlang.github.io/>
Gen (probabilistic) - <https://probcomp.github.io/Gen/>
Pyro (probabilistic) - <https://pyro.ai/>
Rascal (meta-programming) - <https://www.rascal-mpl.org/>
Pharo (software as objects, immersive) - <https://pharo.org/features>
DarklangGPT (Deployless cloud backends with AI-generated code) - <https://darklang.com/>
LangChain (simplify APP construction with LLMs) - <https://langchain.com/>

SOUND*

Gwion - <https://gwion.github.io/Gwion/>
Kronos vesaronilo - <http://kronos.vesaronilo.com/>
Supercollider - <https://supercollider.github.io/>
Faust - <https://faust.grame.fr/>
Chuck - <http://chuck.cs.princeton.edu/>

NETWORKING*

Live Raizo (network simulation) - <https://sourceforge.net/projects/live-raizo/>
P4 (implement specific network behaviours) - <https://p4.org/>
Helena (browsing automation) - <https://helena-lang.org/>
Volunia (rpg-like browser) <http://www.volunia.com/>
Gather (rpg-like meetings) - <https://www.gather.town/>
Lynx (textual browser) - [https://en.wikipedia.org/wiki/Lynx_\(web_browser\)](https://en.wikipedia.org/wiki/Lynx_(web_browser))
Beaker Browser (peer-to-peer Web browser) - <https://beakerbrowser.com/>
Nyx browser (keyboard-driven browser) - <https://github.com/atlas-engineer/next>
Jolie (microservices) - <https://www.jolie-lang.org/>
Daphile (headless music server) - <https://www.daphile.com/>
Skywave linux (software defined radio servers) - <https://skywavelinux.com/>
Gotenna (off-grid mobile mesh) - <https://gotenna.com/>
Manyverse (off-grid social networking) - <https://www.manyver.se/faq/what-is-manyverse>
p2p networking - <https://www.gnunet.org/en/> <https://zeronet.io/> <https://freenetproject.org/>
Eternal-september private news server (usenet) - <http://eternal-september.org/>
Aioe.org public news server (usenet) - <https://news.aioe.org/>
What is the Usenet improvement Project? - <http://twovoyagers.com/improve-usenet.org/>
Fediverse (federated servers for web-publishing) - <https://en.wikipedia.org/wiki/Fediverse>
Buzz (swarms robotics) - <https://github.com/buzz-lang/Buzz> && <https://the.swarming.buzz/wiki/doku.php>
Wing (entire cloud as the computer) - <https://github.com/winglang/wing>

OPERATING SYSTEM*

XOD.IO (microcontrollers) - <https://xod.io/>
Elemental Processor SIMulator - <https://wepsim.github.io/>
Mikrocodesimulator MikroSim 2010 (microcode) - http://www.mikrocodesimulator.de/index_eng.php
Katai Struct (binary data structures) - <https://kaitai.io/>
Snowdrop OS (16-Bit Operating System) - <http://sebastianmihai.com/snowdrop/>
Turbo Rascal (design of 8-bit/16-bit games)- <https://lemonspawn.com/turbo-rascal-syntax-error-expected-but-begin/>
NESFab (creating NES games) - <https://pubby.games/nesfab.html>
Tunguska (a ternary computer emulator) - Viktor Lofgren - <http://tunguska.sourceforge.net/>
The Trillium Architecture - Douglas W. Jones - <http://homepage.divms.uiowa.edu/~jones/ternary/trillium.shtml>
Red (full-stack) - <https://www.red-lang.org/p/about.html>
Racket - <https://racket-lang.org/> && Neverlang - <https://cazzola.di.unimi.it/neverlang2.html> (language creation)
Rescatux - <https://www.supergrubdisk.org/rescatux/> && Parted Magic - <https://partedmagic.com/> (OSes for rescue and recovery)
Minix - <https://www.minix3.org/> && 'An Open Letter to Intel' - <https://www.cs.vu.nl/~ast/intel/>
Los Procesadores Intel tienen un Secreto Misterio - <https://www.youtube.com/watch?v=CaLb7waR6eo>
Debian-hurd (debian over Hurd) - <https://www.debian.org/ports/hurd/> https://en.wikipedia.org/wiki/GNU_Hurd
Trisquel (ubuntu over Libre-Linux) - <https://trisquel.info/>
Noulith (attempt to give myself a new Pareto-optimal choice for quick-and-dirty scripts) - <https://github.com/betaveros/noulith>
Ratpoison (Window Manager) - <https://www.nongnu.org/ratpoison/>
IceWM (Window Manager) - <https://icewm.org/>
RedoxOS - <https://doc.redox-os.org/book/ch01-06-how-redox-compares.html>
Linux From Scratch! - <https://www.linuxfromscratch.org/>

Assemblyscript (A TypeScript-like language for WebAssembly) - <https://www.assemblyscript.org/>

LANGUAGE*

Sono (linguistic study) - <https://github.com/Nallantli/Sono>

Quorum (evidence-oriented) - <https://quorumlanguage.com/reference.html>

Inform7 (interactive narrative, textual adventures) - <http://inform7.com/>

Poliqarp (universal concordancer for large corpora) - <http://poliqarp.sourceforge.net/about.html>

Paper generator - https://en.wikipedia.org/wiki/Paper_generator

Markup Languages list - <https://web.mit.edu/mecheng/pml/standards.htm>

GRAPHICS*

Curv (mathematical methods for art design)- <https://github.com/curv3d/curv>

GraRLS (static graphic images) - <http://www.grarls.org/>

KUIML (skin and GUI) - <https://www.bluecataudio.com/Vault/Skins/KUIML/>

Complexities of Color in Computing - Ellen Wondra - <https://www.youtube.com/watch?v=VCvOwoeOgv8>

Dr Huang 's Math Handbook Calculator - <http://drhuang.com/> && <http://drhuang.com/science/mathematics/software/>

Draw2D (diagrams) - <http://www.draw2d.org/draw2d/examples.html>

Threejs (creation of 3D content) - <https://threejs.org/manual/#en/fundamentals>

Video (video editing) - <https://lang.video/>

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