

Inequalities. Treaty on Inflation.

The Stack is defined as from Towers of Hanoi in cos 9 Pension accumulating Wealth (transitivity), -Passing in Lisboa as Tax in Tarfication, with narrow roots as I_n .

In French *Stabilité à Voisinage* (Neighborhood) is by $\frac{\partial x}{\partial t} = f(x, t) \downarrow$ defining a Dynamical System of f , as a System. Recall that $\frac{\partial x}{\partial t} = f(x, t) = Ax + f_i(x)$ where Lyapounov as $o(\|x\|)$ as from f_i , from Banach Spaces a non linear added function as by NATO where f is a Singularity as 2nd parameter (namely f_i) and Ax a Critical Point. Defining desingularization as $\frac{\partial x}{\partial t} = f(x, t)$ a parametric Family by symetry at Casino. As no $O(\|x\|) \downarrow$, we stabilize at the Rosenthal Library.

Integral Inequalities are define as from $f > g \Rightarrow \int_a^b f dt > \int_a^b g dt$. The Fundamental

Inequalities are by Hilbert and the Inner Product Space $\int_a^b fg dt$ and $\int_{x-1}^x fg dt$ in $x_k - x_{k-1}$, and the

Banach Space as Cauchy Solutions (see Capital). (these are Dicrete and Continuous Forms.). The the Partition as Schwartz Inequality is: $|x|_2^2 \cdot |y|_2^2 \geq |xy|$ and Triangle Inequality is $|a| + |b| \geq |a + b|$. THE English Language and Detail: make accessible Co Racines Polynomiales Pre Calculus $a > bc$ and $\frac{a}{b} \leq c \rightarrow$ roots. From Math Analysis (General) $\rightarrow$ (Inequalities) $\rightarrow$ Calculus as Elementary Functional Analysis. (Investment).

Discrete Differential Transitive elementary inequalities for 2 numbers: $a, b \in \mathbb{R}$,

$$\frac{a+b}{2} \geq \sqrt{ab} \geq \frac{2}{\frac{1}{a} + \frac{1}{b}}, \frac{a+b+c}{2} \geq \sqrt{abc} \geq \frac{2}{\frac{1}{a} + \frac{1}{b} + \frac{1}{c}}$$

. Where abc is a Convexity. The weighted Inequalities $\alpha, \beta \geq 0, \alpha + \beta > 0, a, b \in \mathbb{R}$, with

$$\frac{\alpha a + \beta b}{\alpha + \beta} \geq a^{\left(\frac{\alpha}{\alpha+\beta}\right)} b^{\left(\frac{\beta}{\alpha+\beta}\right)} \geq \frac{\alpha + \beta}{\frac{\alpha}{a} + \frac{\beta}{b}}$$

The Adjacence as consequent by an Entropy (a or $b \rightarrow a + b$ for good a and b): $|a| + |b| \geq |a + b|$. (transitivity at Speech)

Chebysev's Inequality: $a = (x_i)$ and $b = (y_i) \in \mathbb{R}^n$. Synchronicity from Inner Product

$$\langle a_i, b_i \rangle \rightarrow (a_i - a_j)(b_i - b_j) \geq 0, \forall i, j \in \{1, \dots, n\}.$$

$\forall p_i, (p_i > 0, \text{ and weight})$

$$\begin{bmatrix} 1 & \dots & 1 \end{bmatrix} \begin{bmatrix} p_1 \\ \vdots \\ p_n \end{bmatrix} \cdot \begin{bmatrix} 1 & \dots & 1 \end{bmatrix} \begin{bmatrix} a_1 b_1 \\ \vdots \\ a_n b_n \end{bmatrix} \geq \begin{bmatrix} p_1 & \dots & p_n \end{bmatrix} \begin{bmatrix} a_1 \\ \vdots \\ a_n \end{bmatrix} \cdot \begin{bmatrix} p_1 & \dots & p_n \end{bmatrix} \begin{bmatrix} b_1 \\ \vdots \\ b_n \end{bmatrix}$$

iff $(a_i - a_j)(b_i - b_j) = 0, \forall i, j \in \{1, \dots, n\}$. The Curvature of Enthousiasm: for same a_i and b_i by Cebysev (see Data in other Papers).

$$\begin{bmatrix} a_1 & \dots & a_n \end{bmatrix} \begin{bmatrix} a_1 \\ a_n \end{bmatrix} \cdot \begin{bmatrix} b_1 & \dots & b_n \end{bmatrix} \begin{bmatrix} b_1 \\ b_n \end{bmatrix} \geq \begin{bmatrix} a_1 & \dots & a_n \end{bmatrix} \begin{bmatrix} b_1 \\ b_n \end{bmatrix}$$

How to work in your Domain ?: Identify Problem, Position, Orientation $f_i \perp f_{i+1}$ from Zone at Rent from Domain, Lieu Non Lieu as Supervision form Data Shift to Domain Adjacence to Stable Non Bifurcation for Well defined Scaling. The Fund and Data Problem: Support (Bound) & Point $\rightarrow \exists$ Local Data $\rightarrow$ Well posed Problem. (Support form Productivity, easier with Inequalities from existence of derivatives). The Well Posed Problem and Claim: Support Border as Mobility (and Support form co Racines Polynomiales). : Naturalization. The Line of Sale: from Form Free to Map and Domain by Bifurcation.

Circular Domain on Geodesic: The Induction defined: $y_1^2 + y_2^2 \geq 2y_1y_2$, for length $\sqrt{(y_1 - y_2)^2}$, Geodesic.(Green Cities !). Here as $y_1^2 + y_2^2$ in $x_1 = y_1^2, x_2 = y_2^2$, as Arithmetic Geometric by Entropy maximization (data) for Surface with co Racines Polynomiales. Stronger Result as Concavity of Mobility:

$$\log\left(\frac{x_1 + x_2}{2}\right) \geq \frac{\log x_1 + \log x_2}{2}$$

from $\frac{x_1 + x_2}{2} \geq \sqrt{x_1 x_2}$. (in length $\sqrt{(y_1 - y_2)^2}$). See Circular Domain as Laymen in Geodesic Cift Cards.

Defining **Resurgence**: Singularity and Critic Point $O(\cdot)$ as a Hopf (defined as: parametric family by Apparentage) Bifurcation with Equilibria as Algiers Walk. (Rosenthal). Paetition and The Bayes Theorem:

$$\Pr(A_i \mid B) = \frac{\Pr(A_i) \Pr(B \mid A_i)}{\sum_{j=1}^k \Pr(A_j) \Pr(B \mid A)} \rightarrow \Pr(A_i \mid B) \cdot \sum_{j=1}^k \Pr(A_j) \Pr(B \mid A) = \frac{\Pr(A_i) \Pr(B \mid A_i)}{1}$$

a Conditional Probability of Event A_i given B from the Conditional Probability of B given each Event A_i and the unconditional Probability of each A_i . Adjacence as Key Word Search.

Occupation and Proposal in Washington as Occupation: contributing with Pillars i as new Activity and Expenses to Join a Board in Range. The Job Domain: as Detremination in Dependence and Indetermination in Independence.

Commerce is defined: as inner product in $O(n)$ Screening as Investment with Partition: $\exists k$ such that $|f_{[a,b]}| < k$, where from Continuity of f , we close a finite interval: $\exists k$ such that $|f_{[a,b]}| < k$.

Classical Inequalities, Quadrature Green Cities as Ordinary and Partial Differnetial equalities (there are new types of Inequalities and Applications to Analysis) as variation involving Derivatives f, f' on (ordinary $x, \frac{\partial x}{\partial t}, \frac{\partial k}{\partial g}$). Interest in Convexity. As

$$(y_1 - y_2) \in \mathbb{R} \Rightarrow (y_1 - y_2)^2 \geq 0 \Rightarrow y_1^2 + y_2^2 \geq 2y_1y_2.$$

$$\text{Cauchy } (y_1 - y_2) \in \mathbb{R} \Rightarrow (y_1 - y_2)^2 \geq 0 \Rightarrow y_1^2 + y_2^2 \geq 2y_1y_2,$$

$$\sum_{i=1}^n (ux_i + vy_i)^2 = u^2 \sum_{i=1}^n x_i^2 + 2uv \sum_{i=1}^n x_i y_i + v^2 \sum_{i=1}^n y_i^2. \text{ And } \left(\sum_{i=1}^n x_i y_i \right)^2 \leq \|x_i\| \cdot \|y_i\|. \text{ With}$$

Quadrature in Green Cities we have $\|ux - vy\| = u^2 \|x\| + v^2 \|y\| + 2uv(x, y),$

$$(x, y)^2 \leq (x, x)(y, y) \text{ Minimization and Lagrange } \|x\| \cdot \|y\| - (x, y)^2 = \sum_{ij=1, i < j} (x_i y_i - x_j y_j)^2,$$

Inner Product Relaxation and **Accreditation by Referral Quadrature. Moule and Investment Fund as Circular Domain and Energy Laymen Match** with Qualifying Energy Utility Environment and Pre Calculus Security. (The Lesser to assignment as Laymen and Freelancers.). Ordinance as $\{y_i\}$ Range $\rightarrow$ Action Waiting and Passing as Probit list in Domain where Subsidy at Cooperathon map Mila as Global Climate Cooperation with Initiative as Increasing Leads $\rightarrow$ Range (Favour and Advantage) in LinkedIn.

Sustainability and Senses of Inequalities as Progressions: unchanged as Shift: if $a < b, b < c$ then $a < c$. Changes as negative and positive coefficient $ac < bc$, same sense added towards ∞ , $a < c, c < d \rightarrow a + c < b + d$, and reciprocal $a < b \rightarrow \frac{1}{a} > \frac{1}{b}$, also called desOrdination. From Closed and Open Interval as Complete Line Segment Distance as Chord and Open, where Incidence with Mason in the sense of Inequalities, as Unions and Intersections of Interval by Inclusivity and Exclusivity (Mary Palcu). (The Bucharest) (Càlin Bugnariu) solution: as by Closed Interval and Intercepts at $x = 0$, [Racines co Polynomiales Support], where **Symmetry** is about x Axis as by $\Delta\{x\}$ and y Axis as by $\Delta\{y\} \rightarrow \exists$ Closed Intervals and Intercepts. The Hard to Fund Enterprises are defined as: from $-\infty \Rightarrow (x \rightarrow a +)$ and $(x \rightarrow a) \Rightarrow +\infty$. (in between Left and Right Side in $\rightarrow \mathbb{R}^+$).

$$\text{Passing(Giving)} \text{ is as } \lim_{x \rightarrow c} f(g(x)) = f(\lim_{x \rightarrow c} g(x)).$$

From Auxiliaires as **Phases** $f'(x)\Delta x$ and Remembrance **Commands** $\epsilon\Delta x$, has the Change defined: $\Delta y = f'(x)\Delta x + \epsilon\Delta x$. The Probit of Incidence is $\mathcal{G}_i$ in Machine Learning as $f^i \perp f^{i+1}$.

Sustanability and Durability introduces the definition: y implicit to $u = g(x)$, then $\partial u = (u_2 - u_1)$. (Scaled !).

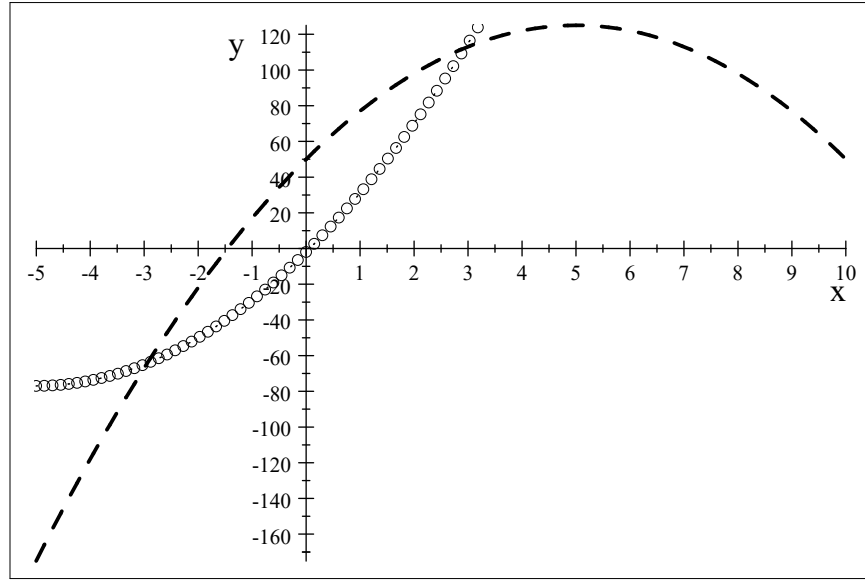
$$\frac{\partial y}{\partial u} \frac{\partial u}{\partial x} = \frac{\partial y}{\partial u} (u_2 - u_1) > 0, \quad \frac{\partial y}{\partial u} u_2 > \frac{\partial y}{\partial u} u_1$$

, where $\frac{\partial y}{\partial u} u_2$ is the Arithmetic Mean and $\frac{\partial y}{\partial u} u_1$ is the Geometric Mean. See the Paper on *Inequalities*, introducing Climate as a well posed Problem.

Circle at Center (x_0, y_0) in: $(x - x_0)^2 + (y - y_0)^2 = k$, with $k > 0 \rightarrow \text{Circle}$, $k = 0 \rightarrow \text{Point}(x_0, y_0)$, $k < 0 \rightarrow \text{NoSolution}$.

$$Ax^2 + Ay^2 + Dx + Ey + F = 0, A \neq 0, a \neq 0, Ay^2 = 0, Ey = 0$$

$ax^2 + bx + c = y$ with $ax^2 + bx + c = y, a < 0$ in $3x^2 + 30x - 2$ and $-3x^2 + 30x + 50$ with Circle from 3 to -3. Also below: $x = ay^2 + by + c$ from $y = ax^2 + \beta x + \zeta$ with intercept at $y = -\frac{b}{2a}$ with Circle of two inverse Parabolas. These are Sets and Spaces and Waves at Graphs. (Nobility at Speech). Also called: One Sided and Infinite Limit. As Hard to Fund Enterprises: Side is defined: from $-\infty \Rightarrow (x \rightarrow a +)$ and $x \rightarrow a \Rightarrow +\infty$ as Left and Right Side. Given $\epsilon > 0$, find $\delta > 0$ such that $|f(x) - L| < \epsilon$ as $0 < |x - a| < \delta$, *Feiertag* as Segments $L - (L \pm \epsilon)$ forwarding as sided form a . in $(a - \delta$ and $a + \delta)$. (Sided Limits as Complete Segments).



Asymptotic to ∞ : $\lim_{x \rightarrow \infty \pm} f(x) \rightarrow L$ as $x \rightarrow \pm M$, a Partition. Inequality as about the Infinite Open Interval (x_0, ∞) , where x_0 in $(0, M)$. The Limit fails to exist: $\exists \varepsilon > 0, \exists M$ such that $|f(x) - L| < \varepsilon$ whenever $x > M$. $f(x)$ is increasing without Bound or decreasing as Co Racines: from which side: $\frac{1}{x}$ in $\mathbb{R}^+$ and $\mathbb{R}^-$ and $-\frac{1}{x}$ in $\mathbb{R}^-$ and $\mathbb{R}$ at Point a in Domain, that is on $x \in \mathbb{R}^\pm$.

The Limit and the Corrector $\lim_{x \rightarrow a} f(x) = L$, in $\lim_{x \rightarrow a} g(x) = L_2, \lim_{x \rightarrow a} [f(x) + g(x)] = L_1 + L_2$, whenever given $\varepsilon > 0, \exists \delta > 0$ such that $|f + g - (L_1 + L_2)| < \varepsilon$ if $|x - a| < \delta$, given $\lim_{x \rightarrow a} g(x) = L_2$. Additivity and Multipliers: $\lim_{x \rightarrow a} [f(x)g(x)] = L_1 L_2$. One Sided and Two Sided limits (Argument for Richter) as Corrector $g(x)$ as $x \rightarrow a +, x \rightarrow a -$. Proof $\lim_{x \rightarrow a+} [f(x)] = \lim_{x \rightarrow a-} [f(x)] = L, \exists \varepsilon > 0, \exists \delta > 0$ such that $|f - L| < \varepsilon$ whenever $0 < |x - a| < \delta$,

$$a < x < a + \delta_1, \quad a - \delta_2 < x < a,$$

Both true from $0 < |x - a| < \delta \Rightarrow \exists |f - L| < \varepsilon$, One Sided for δ_1, δ_2 , two sided presented as New. **Limit and Corrector:** by Partition $\Delta f \geq M \Delta x, \frac{\Delta f}{\Delta x} \geq M$, where Δf is from Internet and $M \Delta x$ as Mathematics in $\{y_i\} \otimes \{x_i\}, X \cap Y$ as Lindeloff, see upward Parabola $x^2 > x \rightarrow x \in [1, \infty), x \geq \sqrt{x}$. (inverse Parabolas as Circles) in Arithmetic x and Geometric $\sqrt{x}$. (commercial Guess). One Sided and Infinite Limits (left or right Progression) $\rightarrow (-\infty, \infty)$ either $a - \delta$ or $a + \delta$. Given $\varepsilon > 0, \exists \delta > 0$ such that $|f(x) - L| = |f(a \pm \delta) - L| < \varepsilon$ if $|x - a| < \delta$ increasing: from One Limit to Left to the Right (complete inclusive movement),

The **Free Variable and Climate and Calculation of Media Use** is defined by Continuity and Big Data and neighborhood at Singular Point (Potential), by Waves close

from proximity at **Singular Point** $\int_0^x f(t) dt$. (Space is defined as: Channel Covering and

Forwarding Functions as monotonous and Bounded by Slices with inner Products). By Zotero and PharmAsia the **Free Variable** lets different Channels and Change as Richter's Service by Ownership Type $\rightarrow s_i$. The **Buy Out (out of Range) $\rightarrow$ Buy In (out of Domain)**, with **One to One : Public as $\mathbb{R}^-$ to Private $\mathbb{R}^+$** . Voir *Tout le Monde en parle*. as *PreCalculus* as Intercept at $x = 0$, and covering at $x_1 x_2 \dots$ in $\{(x_i, y_i)\} : \mathbb{R}^-$ in *Tout le Monde en parle*.

The exercise and classification is by the Least Squares Methods. **Zotero Connection as Channel as Finite Mathematics** (documents $k > i$ in G_i) as a Range **Connection**: $\mathbb{R}^-$ and $\emptyset$ and $\mathbb{R}^+$: Occurrence expansion as Media Out Reach in Vertices: **The Synonyms is by Domain as Platform (Chernikova and no Media) by Range form Cloud : Probit: Environement as Sustainable Durable Hard to Fund.(See Health Coverage in the US). Period at Test, Assymptoticity by Streamline Her).**

Cover Up Activity: by Change or Variation with Curvature and Free Variable (example: $\phi \in \Phi, \phi_i = 1, \cos \vartheta, \sin \vartheta, \cos 2\vartheta, \sin 2\vartheta \dots$ There are Constant Greatness that do not Vary in Domain: as $(\cos \vartheta, \sin \vartheta)$, also called Domain of Definition $-1 \leq x \leq 1$ a Segment $|x| < M$, a bounded Variable and time relationship t . Domain and Time is defined: $Q = \pi R^2$ where change is in Q or in R . (Experimentation as Arithmetic and Geometric Means). Determinate and Undeterminate Forms: Ordinate Variables as $(x, f = y, \dots)$ where x , is called Independent Variable as Dependent functionals by the Knowledge Translator. As f grows, $\exists x, \exists f(x)$, at x : increasing value of Variable that is Independent, corresponding at $f(x)$: a bigger Value of Functions. If $\exists x, \exists f_i(x)$, (f is multivoque at i , with f univoque if $i = 1$. By Covering we understand $x_i \in G_i \rightarrow \exists y_i$, and the Inner Product: $(\cos \vartheta, \sin \vartheta) = \alpha = \cos \vartheta \sin \vartheta = y(\alpha)$, with $\alpha_1 + \alpha_2 + \dots + \alpha_n = \text{Product}$. Representation of equaties and inequalities as Implicit and Explicit. The Forwarding Functions: (power,exponent,logarithmic, trigonometric and invertible functions.

Cover Up Inflation: for items: Left Pane 1) to Central Pane 2) to Right Pane 3)- 1) : My Library Specific Project and Collection of Central Pane as Photo, 2) Occupational Transit defining Inflation as having Time (Mensa Group) by Inflation from chosen Constraints, Free Variable (which Collection are Items in ? and which Note is a Smart Collection ?). 3) Project Creator and Progression Domain as Real Data. **Change also known as: Ownership** type as s_i , the Successes. **Definition of Business: Buy Out** (out of Range) $\rightarrow$ **Buy In** (out if Domain), as One to One: by **Public** $\mathbb{R}^-$ to **Private** $\mathbb{R}^+$. (Range to Domain). **Bucharest Investment:** Collection Equity $\mathbb{R}^+$ and Security (Evolutive Emerging Markets and Finite Mathematics as Non ETF (Exchange Traded Funds), known as twice emerging Market equal to once the Us Market in $\mathbb{R}^- \rightarrow \mathbb{R}^+$. We call the Investment Match as Inflation and regard Gift Cards in Showcase. No Need of Invetment and No Man's Land. Society and Governance: Money invested intervention as Zotero Local: Contract Association Desjardins (Fiches techniques), Linkedin Out, Pre Calculus (see s_i above as Ownership) as Work Today, Start Up, Residence.

Finite Mathematics is defined: Point Cost Analysis, Least Squares Row Operation, Inversion of Matrix, Compounded and $\mathbb{R}^+$ Future Value, Bayes Theorem, Antiderivatives (differenetial integral Fundamental theorem of Calculus), Extrema and Finite Graphs and Roots.

Effective Walk (see Domain in PharmAsia's Domain): from the Uniform Distribution in $\mathbb{R}^-$ and $\mathbb{R}^+ \rightarrow \exists \text{Logistic Step} \rightarrow \text{co - racines Polynomiales}$. Points in Plane as Domain: as $(\cos \vartheta, \sin \vartheta)$ and Bound at Chord, where Polar Variable is a Walk as: $x_i = 1 + \frac{1}{i}$ and in Supplement $|x_n - 1| = \frac{1}{n}$, $(1 + \frac{1}{n})^n \rightarrow e$, $|x_n - 1| = \frac{1}{2^n}$. If $x_n = 1 + (-1)^n \frac{1}{2^n}$, $\frac{1}{2^n} < \epsilon$, $2^n > \frac{1}{\epsilon}$, $n > \frac{\log \frac{1}{\epsilon}}{\log 2}$. Look for S_n as $|x| > M$.