Unstable Singularities And Randomness

#unstable singularities #randomness in systems #chaos theory #nonlinear dynamics #system unpredictability

Explore the fascinating interplay between unstable singularities and inherent randomness within complex systems. This deep dive uncovers how seemingly small perturbations can lead to significant, unpredictable outcomes, touching upon critical concepts in chaos theory and the limits of predictability in nature and technology.

Unstable Singularities And Randomness
Joseph P. (2004). Unstable Singularities and Randomness. Elsevier. p. 7. ISBN 0080474691. Kinniment, David J. (2008). Synchronization and Arbitration in... 20 KB (2,510 words) - 17:14, 7 September 2023
The attributes of singularities include the following in various degrees, according to context: Instability: because singularities tend to produce effects... 11 KB (1,408 words) - 00:21, 24 January 2024
Borderline personality disorder (BPD), also known as emotionally unstable personality disorder (EUPD), is a personality disorder characterized by a pervasive... 189 KB (19,246 words) - 02:10, 16 March 2024
formed by the least unstable periodic orbits, which can be identified in the eigenvalue spectra of SSA and M-SSA. The identification and detailed description... 42 KB (6,777 words) - 21:27, 9 February 2024
January 1970). "The Singularities of Gravitational Collapse and Cosmology". Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences... 148 KB (15,954 words) - 14:45, 11 March 2024
Although these singularities have been studied primarily on spatially homogeneous models, there are convincing reasons to assume that singularities in the general... 166 KB (20,980 words) - 23:21, 20 February 2024
decomposition methods like using the singular value decomposition. Some matrix decomposition methods may be unstable, but have straightforward modifications... 18 KB (2,507 words) - 03:52, 21 December 2023
certainty. A guess is also an unstable answer, as it is "always putative, fallible, open to further revision and interpretation, and validated against the horizon... 17 KB (2,286 words) - 02:18, 12 March 2024
up to some accuracy and some range for the input values, but some interesting phenomena such as solitons, chaos, and singularities are hidden by linearization... 21 KB (2,597 words) - 22:46, 8 March 2024
unstable correlation coefficient. Due to this inverse problem, Á 1 {\displaystyle \rho _{1}} tends to be biased upwards and therefore close to 1 and hence... 10 KB (1,521 words) - 19:37, 21 February 2023
NewScientist December 13, 2008 Nurgaliev, I. S. (2010). "Singularities are averted by vortices". Gravitation and Cosmology. 16 (4): 313–315. Bibcode:2010GrCo..... 23 KB (2,771 words) - 03:00, 19

January 2024
years, but unstable coalitions or a no-confidence vote can dissolve a government earlier. The first Arab-led party was established in 1988 and as of 2022... 393 KB (38,071 words) - 03:39, 16 March 2024
to any change from its current state may be unstable, in which case the system is said to be in an unstable equilibrium. The magnitude of the forces that... 64 KB (7,183 words) - 17:12, 14 January 2024
resulting in a precision loss and making the Rayleigh–Ritz method numerically unstable in the presence of round-off errors. The loss of precision may be avoided... 37 KB (4,427 words) - 07:04, 12 December 2023
"Quantised singularities in the electromagnetic field". Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical... 76 KB (7,908 words) - 11:05, 7 March 2024
probability that the erroneous output occurs, or it might be expressed as an unstable high energy state in the network. In contrast to supervised methods' dominant... 26 KB (2,360 words) - 00:38, 29 February 2024
This is a list of alternate history fiction, sorted primarily by type and then chronologically. American Civil War alternate histories Axis victory in... 112 KB (279 words) - 15:28, 19 February 2024
"Noncollision Singularities in a Planar Four-body Problem". arXiv:1409.0048 [math.DS]. Xue, Jinxin (2020). "Non-collision singularities in a planar 4-body... 189 KB (19,482 words) - 20:09, 2 March 2024
is small and the number of considered variables p is large, the above empirical estimators of covariance and correlation are very unstable. Specifically... 25 KB (3,923 words) - 01:36, 24 August 2023
well-conditioned problem may be either numerically stable or numerically unstable. An art of numerical analysis is to find a stable algorithm for solving... 38 KB (3,871 words) - 04:15, 1 March 2024

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Infinite water
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Intro
Black Holes
geodesic incompleteness
Quantum mechanics
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2. Condensation
3. Leaving Winter Behind
4. Forgiveness
5. Shulman - First Came the Stars (Bluetech remix)

6. Pitch Black - Ape to Angel (Bluetech's Evolution remix)
7. Airstream
8. Dreamtime Lullaby
9. Shimmer
10. Wilderness
11. A Garland of Stars
Modern Robotics, Chapter 5.3: Singularities - Modern Robotics, Chapter 5.3: Singularities by Northwestern Robotics 33,026 views 6 years ago 6 minutes, 37 seconds - This video discusses robot **singularities**, and Jacobians where the number of joints is not equal to the number of components of the ...
Jacobian Matrices
Joint Forces
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FALSE VACUUM
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We Might Live in a Black Hole
Many Worlds
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Other Dimensions
The Destruction of the Universe
The Unexplained
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How to Exploit?
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Idea 2: Double Slits
Idea 3: XY Switching
Where From Here?
Outro & Credits
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Reasons Aliens Might Not Contact Earth
We're Not Advanced Enough
Aliens Never Contact Anyone
They Don't Know We're Here
We Are Alone in our Abilities to communicate
Don't Blow Your Planet's Cover
There's something About the Universe We Don't Know
HELLCALLER Warlock Hero Talents Have Arrived! Initial Thoughts and Impressions - HELLCALLER Warlock Hero Talents Have Arrived! Initial Thoughts and Impressions by Kalamazi 9,606 views 1 day ago 26 minutes - Intro: 0:00 Hellcaller Hero Talents: 0:44 Patreon, Summary and Outro: 24:18 ...
Intro
Hellcaller Hero Talents
Patreon, Summary and Outro
Chaos theory and geometry: can they predict our world? – with Tim Palmer - Chaos theory and geometry: can they predict our world? – with Tim Palmer by The Royal Institution 183,847 views 7 months ago 1 hour, 10 minutes - The geometry of chaos can explain our uncertain world, from weather and pandemics to quantum physics and free will. This talk ...
Introduction
Illustrating Chaos Theory with pendulums (demo)
Fractal geometry: A bridge from Newton to 20th Century mathematics
The three great theorems of 20th Century mathematics
The concept of State Space
Lorenz State Space
Cantor's Set and the prototype fractal
Hilbert's Decision Problem
The link between 20th Century mathematics and fractal geometry
The predictability of chaotic systems
Predicting hurricanes with Chaos Theory
The Bell experiment: proving the universe is not real?
Counterfactuals in Bell's theorem
Applying fractals to Bell's theorem
The end of spatial reductionism
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Intro
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FOOLED BY RANDOMNESS SUMMARY (BY NASSIM TALEB) - FOOLED BY RANDOMNESS SUMMARY (BY NASSIM TALEB) by The Swedish Investor 204,878 views 4 years ago 12 minutes, 8 seconds - As an Amazon Associate I earn from qualified purchases. 5 great takeaways from Nassim

Nicholas Taleb's Fooled by ...
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1. Survivorship Bias
2. The Skewness Issue
3. The Black Swan Problem
4. Pascal's Wager
5. The 5 Traits of The Market Fool
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The Dark Side Of The Singularity | Answers With Joe - The Dark Side Of The Singularity | Answers With Joe by Joe Scott 779,516 views 6 years ago 13 minutes, 38 seconds - Or... How To Not Be A Horse. Automation and AI promise to usher in an era of amazing productivity and innovation. But they also ...
The BBC released a report just a few weeks ago that said that 30% of jobs are going to go away in the next 10 years because of automation.
The transportation sector actually makes up 25% of the jobs in the United States, if you can believe that.
Cadillac is so bullish on self-driving technology, they spent millions of dollars to create a lidar map of every highway in the United States using their own proprietary system.
Some people are talking about a basic minimum income, a flat amount of money that everybody in a society makes, as a safety net to keep people above water.
The question is, will we be able to change with it?
The Illusion of Certainty: Risk, Probability, and Chance - The Illusion of Certainty: Risk, Probability, and Chance by World Science Festival 694,882 views 9 years ago 1 hour, 28 minutes - Stuff happens. The weather forecast says it's sunny, but you just got drenched. You got a flu shot—but you're sick in bed with the ...
Josh Tenenbaum and an experiment in ESP.
Risk, Probability, and Chance.
Marcus du Sautoy's Introduction.
Participant Introductions.
Are we good or bad at interpreting numbers?
The Monty Hall problem.
The fight or flight math means we understand numbers?
The "numbers are important" experiment.
VerizonMath: Verizon doesn't know Dollars from Cents.
If you play a lottery and there is 1 winner in a 1000, what is your percent of winning?
How well are our brains tuned for evidential data.
What is the birthday problem?
The way probability's are phrased are as important as the numbers.
Do we have a conception of a million?
What is a prior?
Josh Tenenbaum ESP experiment results.
"Numbers are important" experiment results.
How do we get a statistical society?
SLT Summit 2023 - Singularities and Nonlinear Dynamics (Physics 3) - SLT Summit 2023 - Singularities and Nonlinear Dynamics (Physics 3) by Developmental Interpretability 113 views 8 months ago 1 hour, 19 minutes - Singularities, and nonlinear dynamics (following e.g. Strogatz). By Jesse Hoogland.
Professor Avi Wigderson on a computational theory of randomness - Professor Avi Wigderson on a computational theory of randomness by ETH Zürich 20,661 views 11 years ago 53 minutes - Avi Wigderson is a professor of Mathematics at the Institute for Advanced Study in Princeton. After studying Computer Science at ...
Plan of the talk
Distributed computation
Cryptography & E-commerce
What is random?
Pseudorandomness

Normal Numbers
Riemann Hypothesis & the drunkard's walk
Möbius' walk x integer, p(x) number of distinct prime divisors
Weak random sources and randomness purification
Pseudorandom Tables
Single-source extractors Probabilistic algorithms with 1 weak random source
Deterministic de-randomization Hardness vs. Randomness
Summary
Multicollinearity (in Regression Analysis) - Multicollinearity (in Regression Analysis) by DATAtab 69,287 views 3 years ago 5 minutes, 57 seconds - In a regression analysis, multicollinearity occurs when two or more predictor variables (independent variables) show a high ...
Extreme events and how to live with them by Nassim Nicholas Taleb - Extreme events and how to live with them by Nassim Nicholas Taleb by Darwin College Lecture Series 113,027 views 4 years ago 1 hour, 4 minutes - Professor Nassim Nicholas Taleb, New York Distributions that are dominated by extremes and tail events require a completely ...
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