

FisMatEcol Boletín

Diciembre 2023

Dr. Oliver López Corona
Dra. Elvia Ramírez Carrillo



Eventos

Descansen



Nassim Nicholas Taleb  @nntaleb · 16h

An old doctor once told me: if weightlifting is so healthy why do I see so many sick porters?

Pple w/physically demanding occupations not are healthy as recreational athletes

Main≠: recr. ex. 1) is done when one feels like it, hence allows for recovery

oem.bmj.com/content/78/10/...



English Edition Invitations Register

the heart.org Medscape Cardiology ▼

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Not All Exercise Is Beneficial: The Physical Activity Paradox Explained

Marilynn Larkin
November 27, 2023

[Add to Email Alerts](#)

Oportunidades

Biological Science Technician

USDA-ARS Plant Genetics Research Unit
Columbia, Missouri

NEW!

Biological Science Laboratory Technician, GS-0404-5-9

USDA-ARS-FDWSRU
Frederick, Maryland

Assistant/Associate Professor Specialty Crop Weed

The Ohio State University
Wooster, Ohio

Curator of Entomology and Assistant Professor

University of Colorado Boulder
Boulder, Colorado

Postdoctoral Research Scientist (Physiology) NEW

 Columbia University Medical Center  United States (US)  New York

 Posted on 11 December 2023  Deadline: 11 January 2024

The Owusu-Ansah laboratory at the Department of Physiology and Cellular Biophysics in the CUIMC is seeking a highly motivated postdoctoral scientist to study the regulation of mitochondrial complex I (CI)...

Senior Bioinformatician NEW

 MRC Laboratory of Medical Sciences  United Kingdom (UK)  london

 Posted on 11 December 2023  Deadline: 2 January 2024

Senior Bioinformatician Bioinformatics Facility MRC Band 3 £48,802 – £52,172 plus London allowances (£3,913 & £1,472) per annum (Higher salary of £52,172 – £56,817 plus London allowances (£3,913 & £1,472)...



Improving biomedical diagnosis
through light-based technologies
and machine learning

TOP



JOB S

11 PhD Positions

Photonics is crucial for maintaining and increasing the competitiveness of EU industry, and light-based instruments are fundamental for non-invasive diagnostics and treatment of diseases, delivering huge economic benefits for national health systems. **Artificial Intelligence (AI)** and **Machine Learning (ML)** have demonstrated their capability to classify and identify patterns in data, achieving reliability levels that are comparable to those of experienced

Conceptos



Matt Dancho (Business Science) ✓

@mdancho84



Understanding P-Values is essential for improving regression models. In 2 minutes, learn what took me 2 years to figure out.

1. The p-value: A p-value, in statistics, is a measure used to assess the strength of the evidence against a null hypothesis.
2. Null Hypothesis (H0): This is a general statement or default position that there is no relationship between two measured phenomena or no association among groups. For example, the regressor does not affect the outcome.
3. Alternative Hypothesis (H1): This is what you want to test for. It is often the opposite of the null hypothesis. For example, that the regressor does affect the outcome.
4. Calculating the p-value: The p-value for each coefficient is typically calculated using the t-test. There are several steps involved. Let's break them down.
5. Coefficient Estimate: In a regression model, you have estimates of coefficients (β) for each predictor. These coefficients represent the change in the dependent variable for a one-unit change in the predictor, holding all other predictors constant.

p-values: What they are...



vs



...and how to interpret them!!!



p-values made easy!

Cassie Kozyrkov (@quasita)
Chief Decision Scientist, Google



MINI LESSON 7: P-Values and P-Value Hacking: a simplified lecture.

Cursos

MITx: Introduction to Computer Science and Programming Using Python

★★★★★ **4.8 stars** 155 ratings

An introduction to computer science as a tool to solve real-world analytical problems using Python 3.5.

This is CS50x

CS50's Introduction to
Computer Science

OpenCourseWare

Donate 

David J. Malan

malan@harvard.edu



 CS50x Movie Night 2022

 CS50x Puzzle Day 2022

 How to Prepare for Technica...

 Zoom Meetings

CS50 Educator Workshop

Gallery of Final Projects 

What's new for 2022?

teaches students how to think algorithmically and solve problems efficiently. Topics include abstraction, algorithms, data structures, encapsulation, resource management, security, software engineering, and web programming. Languages include C, Python, and SQL plus HTML, CSS, and JavaScript. Problem sets inspired by the arts, humanities, social sciences, and sciences. Course culminates in a final project. Designed for concentrators and non-concentrators alike, with or without prior programming experience. Two thirds of CS50 students have never taken CS before. Among the overarching goals of this course are to inspire students to explore unfamiliar waters, without fear of failure, create an intensive, shared experience, accessible to all students, and build community among students.

► Watch an introduction

How to Take this Course

Even if you are not a student at Harvard, you are welcome to "take" this course for free via this OpenCourseWare by working your way through the course's eleven [weeks](#) of material. If you'd like to submit the course's problem sets and [final project](#) for feedback, be sure to [create an edX account](#), if you haven't already. Ask questions along the way via any of the course's [communities](#)!

- If interested in a [verified certificate](#) from [edX](#), enroll at [cs50.edx.org](#) instead.
- If interested in a [professional certificate](#) from [edX](#)
 - in web development, enroll at [cs50.edx.org/programs/web](#) instead.
 - in artificial intelligence, enroll at [cs50.edx.org/programs/ai](#) instead.

And make sure to check the description for a lot of extra resources that go along with the course.

■ If interested in transfer credit and accreditation from Harvard Extension School, register at [web.dcc.harvard.edu/extension/cs/c/cs50](#) instead.



UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO
PROGRAMA DE POSGRADO EN CIENCIAS BIOLÓGICAS

Denominación de la actividad académica (Temas selectos): Complejidad en Ecología, que nos puede decir la física sobre la salud de los ecosistemas.

Clave: (no llenar)	Semestre: 2023-1	Campo de conocimiento: Ecología, Manejo integral de ecosistemas	Número de Créditos: 8
Carácter Optativa de elección	Horas		Horas por semana
	Teóricas 32	Prácticas 32	4
			Horas por semestre 64

Modalidad Curso-Seminario	Duración del curso Semestral
-------------------------------------	--

Seriación indicativa u obligatoria antecedente, si es el caso:

No hay seriación

Seriación indicativa u obligatoria subsecuente, si es el caso:

No hay seriación

Objetivo general: La dinámica de los ecosistemas resulta difícil de estudiar debido en parte al enorme papel que las interacciones espaciales tienen en la estructura de las comunidades; a las complejas interacciones bióticas a distintas escalas de observación que intervienen en la dinámica global del ecosistema; a que dichas interacciones pueden cambiar en el tiempo y por otro lado, por que cada vez más la dinámica biológica de los ecosistemas está más acoplada con dinámicas socioeconómicas. En ese sentido, los ecosistemas pueden (deben) ser pensados como socio-ambientales acoplados (CHANS) que se caracterizan por presentar características complejas, incluyendo retroalimentación, no linealidad, umbrales, eventos extremos, efectos heredados y la capacidad de recuperación. En éste curso se revisarán las bases conceptuales y teóricas de las ciencias de la complejidad, así como su relación con uno de sus grandes motores: la revolución de los datos, en particular el big data ambiental. Construiremos una propuesta de cómo entender a la integridad y salud ecosistémicas desde la perspectiva compleja usando para ello los conceptos de criticalidad y estabilidad dinámicas.

MEMORIA DE LA ESCUELA

Escuela de primavera
en física y matemáticas
aplicadas a la ecología

VIRTUAL

Require pre-registro: <https://forms.gle/hBokNotfzKpSmPAYA>

Organiza: IIMAS, Fac de Psicología, IxM-CONACyT

Comité: Dr. Oliver López-Corona, Dra. Elvia Ramírez-Carrillo, Dr. Pablo Padilla

Sitio web: <https://www.lopezoliver.otrasenda.org/fismatecol/>







Mi propuesta de que es lo que debería enseñarse y cómo.



Curso semestral 2021-2

INTRODUCCIÓN A LA COMPLEJIDAD

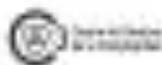
Materia optativa de la Facultad de Ciencias - UNAM

Maximino Aldana

Instituto de Ciencias Físicas y Centro de Ciencias de la Complejidad de la UNAM

02/MAR/21

SESIÓN - 01 ▼



Cultura

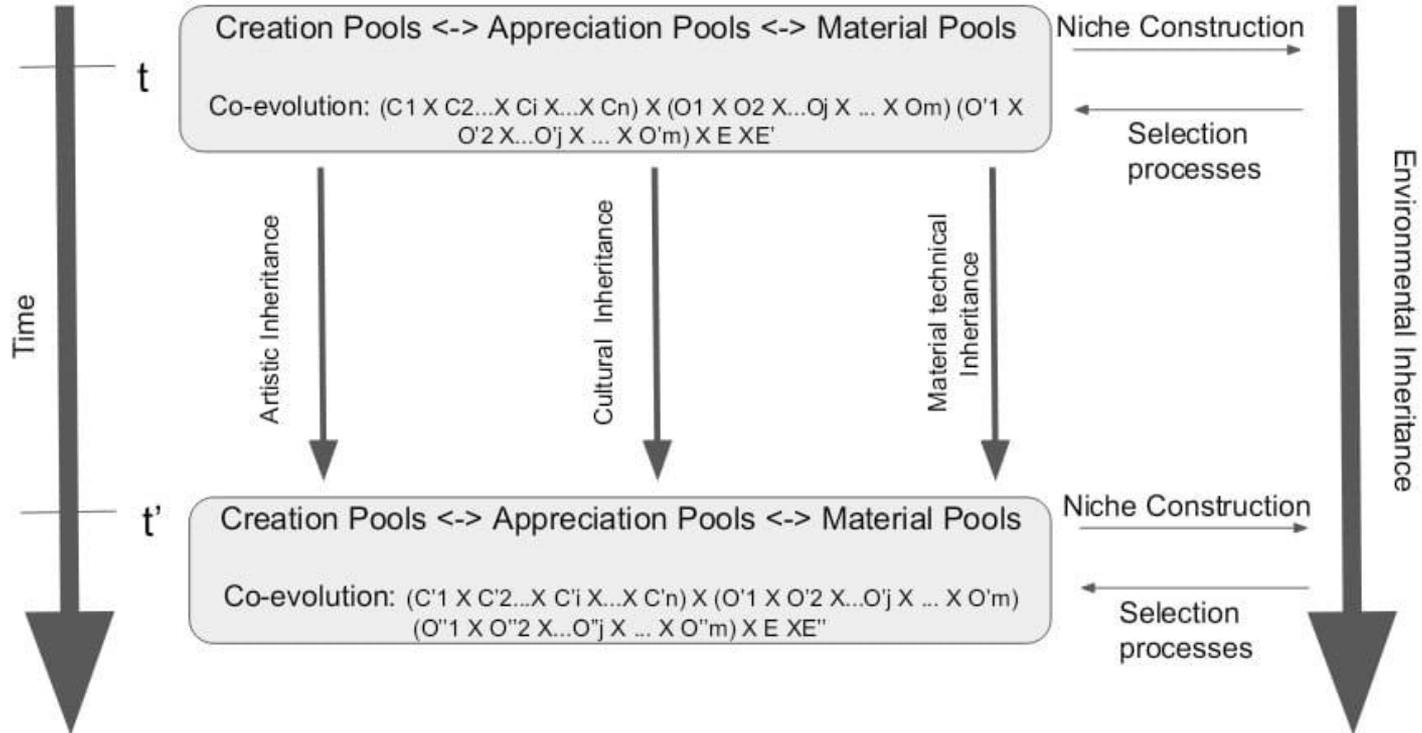
Do we need to reach the stars?

It's imperative



Debatan en equipos de tres ;)

Art as a complex co-evolutionary process



COMISIONES
ABIERTAS

Regala
arte

Comisiones de Ilustración

*Científica y
Naturalista*

¿Necesitas una
ilustración para tu

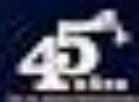
*Tesis de
ciencia?*

<https://www.facebook.com/AdrialychnisArt>



COYOL XAUH QUI

El astro,
la diosa y
el hallazgo



CICLO DE CONFERENCIAS DE LA EXPOSICIÓN TEMPORAL

CONFERENCIA 21

Sábado
22 de julio
de 2023 - 10 h

El crecimiento del Imperio Mexica a través
del estudio de la biodiversidad de especies
identificadas en las ofrendas del Templo Mayor

Miguel Ángel Báez Pérez
Instituto Templo Mayor (ITM)

¡Sigue la transmisión en vivo!
ITM Museo Zona Arqueológica
del Templo Mayor

Ampliación Casa Mexicana

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la transformación de esta obra.
Queda permitida la impresión en su totalidad.



Artículo

SPECTRE: standardized global spatial data on terrestrial SPECies ThREats

 Vasco V. Branco,  Luís Correia,  Pedro Cardoso

doi: <https://doi.org/10.1101/2023.11.26.568516>

This article is a preprint and has not been certified by peer review [what does this mean?].

[Abstract](#)**Full Text**[Info/History](#)[Metrics](#) [Preview PDF](#)

Abstract

Motivation SPECTRE is an open-source database containing standardised spatial data on global environmental and anthropogenic variables that are potential threats to terrestrial species and ecosystems. Its goal is to allow users to swiftly access spatial data on multiple threats at a resolution of 30 arc-seconds for all terrestrial areas. Following the standard set by Worldclim, this data allows full comparability and ease of use under common statistical frameworks for global change studies, species distribution modelling, threat assessments, quantification of ecosystem services and disturbance, among multiple other uses. A web user interface, a persistent online repository, and an accompanying R package with functions for downloading and manipulating data are provided.

Videos





Escuela de Gobierno @EGobiernoTP · 30 ago.

...

Hoy en [@TheDataPub](#), el Dr. Oliver López-Corona ([@otrasenda_AC](#)) habló del peligro de las narrativas falsas basadas en datos; se refirió a los límites de la inferencia en sistemas complejos, así como a las fallas típicas en el razonamiento estadístico y probabilístico.



Libros

The Re-Read List (RRL)

Contrary to those never ending reading lists, in here we will only share Lindy books that deserve not only to be read but re-read several times. Those books that renew themselves when reopened, in which you may find new hidden details or deeper layers of knowledge.

by

Giovanni H. Uribe & Oliver López-Corona

Notas

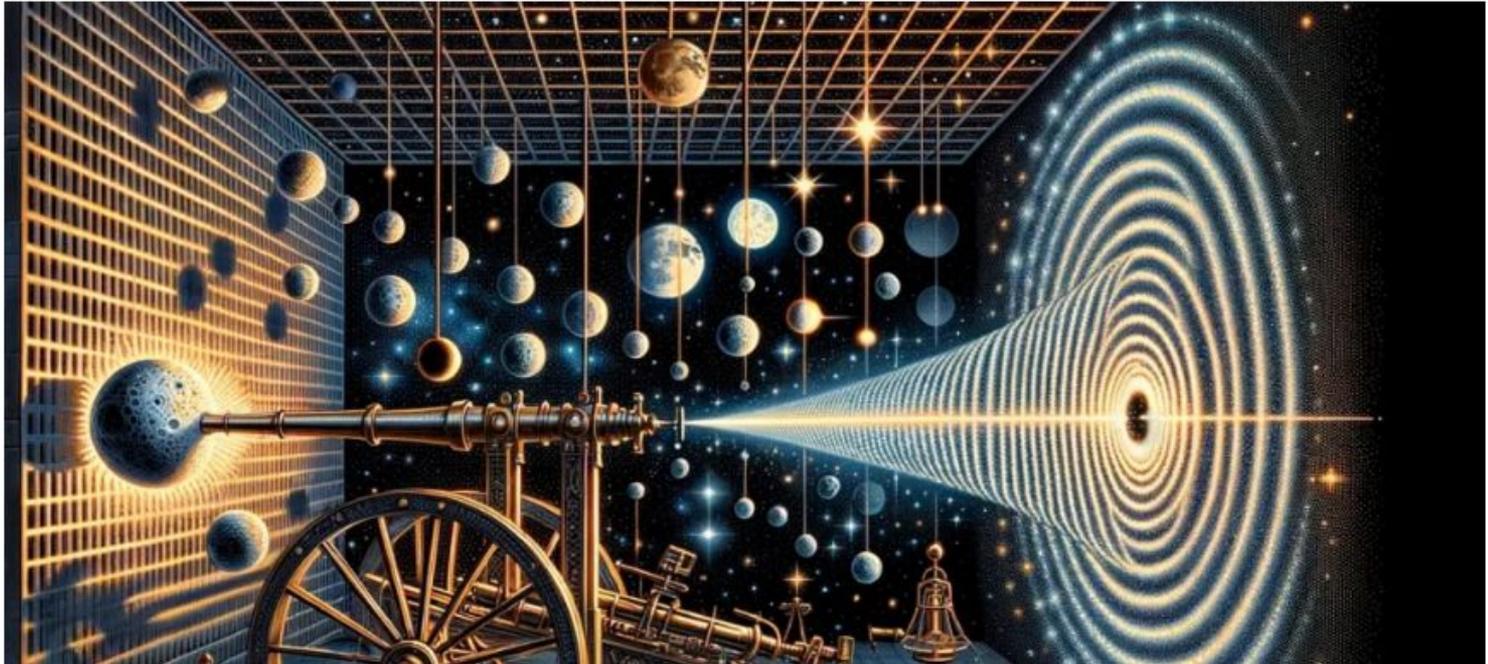
Beavers return to Lincolnshire after 400 years

🕒 1 hour ago



A maverick physicist is building a case for scrapping quantum gravity

Gravity might be classical, not quantum, physicist Jonathan Oppenheim suggests





ESTUDIO

UNAM: Ausencia de proteínas durante infancia debilita conectividad cerebral

• Puede fomentar la pérdida de la capacidad del organismo humano para responder ante cambios y perturbaciones del medio ambiente. Los resultados se publican en la revista PLOS ONE

