Ice-breaker Session

EFPSI Stats Leaders Meeting, May 2023

Organization & Acknowledgements

Session organizers: Arina Kazimianec, Evanthia Koukouli, Jenny Wissmar

Special thanks to Tricia Byers, Christine Fletcher, Emmanuel Zuber and David Wright for their feedback and support.

Welcome!

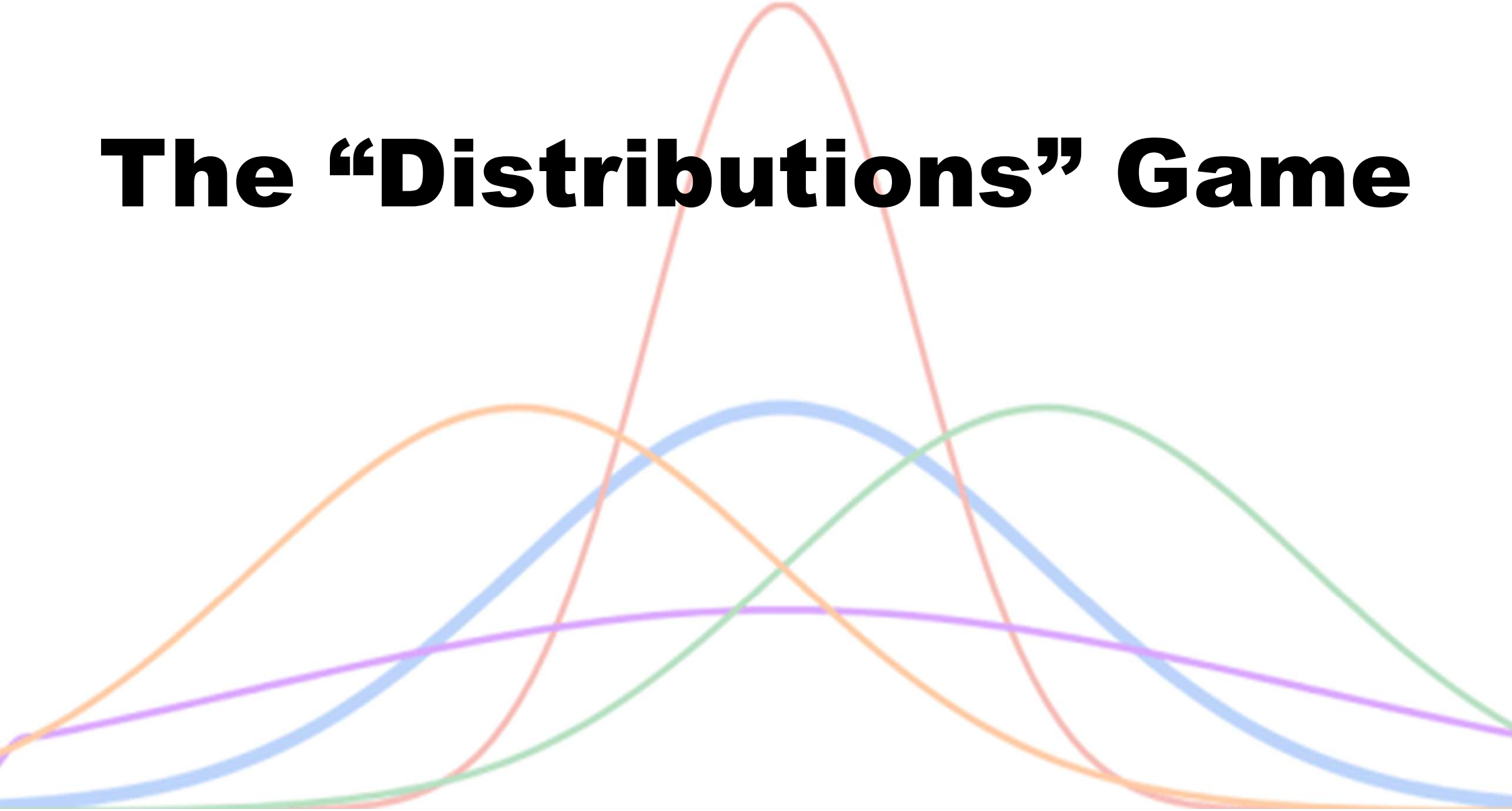
Enjoy the video we prepared for you!


The “Career Reflection” Game

What advice would you give yourself to do more of 15 years ago?

Please fill out the following form:
https://forms.office.com/e/DNu8QxqqJG

The “Distributions” Game



Rules

- Discuss with your teammates and figure out the answers to the following questions. 1 point will be given for every correct answer!
- The point of the game is to have fun and get to know each other in a creative manner, so there is no reason to cheat and search the answers online!

HAVE FUN!

Q1: Match the names with the dinosaurs.

Student's t Rex

Velociraptor

Stegonormalus

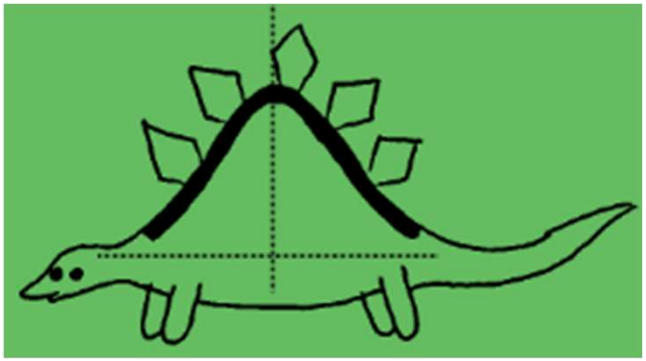
Paretodactyl

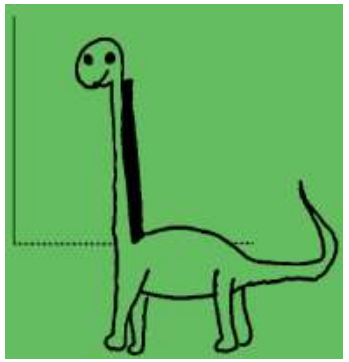
χ^2atops

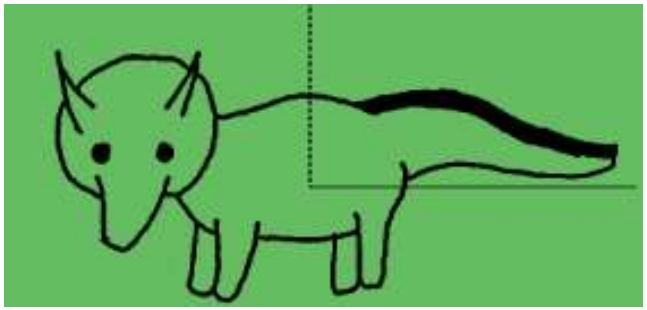
Poissonodon

Albertosaurus

Diraciosaurus







Design by Tamara Broderick.

Q2: Find the fake distribution names.

Q3: Match the distributions with the name and date of their discovery.

Bernoulli, J.	Gompertz, B.	Gauss, C.F.	Poisson, S.D.	Weibull, W.	Bayes, T.	Maxwell, J.C.	Galton, F. McAlister, D.	Abbe, E.K.	Gosset, W.S.

Log-normal

Poisson

Chi-squared

Weibull

Normal

Beta

Gompertz

Maxwell-Boltzmann

Student's t

Binomial

1713	1763	1809	1825	1837	1859	1863	1879	1908	1939

Q4: Match the distributions with the correct kurtosis term.

The standard measure of a distribution's kurtosis (excess kurtosis; from Greek “kurtos” or “κυρτός” means “curved”), originating with Karl Pearson, is a scaled version of the fourth moment of the distribution.

Mesokurtic distributions have zero excess kurtosis; from Greek “meso-” or “μέσος” means “in the middle”. **Leptokurtic** distributions have positive excess kurtosis, i.e. fatter tails; from Greek “lepto-" or “λεπτό” means “thin". **Platykurtic** distributions have negative excess kurtosis, i.e. thinner tails; from Greek “platy-“ or “πλατύ” means “wide".

Mesokurtic

Platykurtic

Leptokurtic

Congratulations!