

# LSE Research Seminar PH500

**General Schedule as of May 12 (in progress)**

**Topic: Current Controversies in Phil Stat**

(LSE, Remote 15:00 – 17:00; Thursdays 21 May-18 June)

**Main Text SIST:** *Statistical Inference as Severe Testing: How to Get Beyond the Statistics Wars* CUP, 2018)\*:

**I. (May 21)** Introduction: Controversies in Phil Stat:

**SIST\*: Preface, Excursion 1**

[Excursion 1 Tour I](#)

[Excursion 1 Tour II](#)

\*Note: The above are from proofs, participants have a copy of the book

[Notes/Outline of Excursion 1](#)

[Postcard](#)

**II. (May 28)** N-P and Fisherian Tests, Severe Testing:

**SIST: Excursion 3 Tour I** (focus on pages up to p. 152)

**Recommended:** Excursion 2 Tour II pp. 92-100

**Optional:** I will (try to) answer questions on demarcation of science, induction, falsification, Popper from Excursion 2 Tour II

**Handout:** [Areas Under the Standard Normal Curve](#)

**III. (June 4)** Deeper Concepts: Confidence Intervals and Tests: Higgs' Discovery:

**SIST: Excursion 3 Tour III**

**Optional:** I will answer questions on Excursion 3 Tour II: Howlers and Chestnuts of Tests

**IV. (June 11)** Rejection Fallacies: Do P-values exaggerate evidence?

Jeffreys-Lindley paradox or Bayes/Fisher disagreement:

**SIST: Excursion 4 Tour II**

**Recommended:**

-Benjamin, D., Berger, J., Johannesson, M., et al. (2017). Redefine Statistical Significance, *Nature Human Behaviour*, 2: 6-10.

-Lakens, D., et al. (2018). Justify Your Alpha, *Nature Human Behaviour*, 2: 168-71.

## V. (June 18) The Statistics Wars and Their Casualties:

**SIST: Excursion 4 Tour III: pp. 267-286; Farewell Keepsake pp. 436-444**

-Amrhein, V., Greenland, S., & McShane, B., (2019). Comment: Retire Statistical Significance, *Nature*, 567: 305-308.

-Ioannidis J. (2019). "The Importance of Predefined Rules and Prespecified Statistical Analyses: Do Not Abandon Significance." *JAMA*. 321(21): 2067-2068. doi:10.1001/jama.2019.4582

-Ioannidis, J. (2019). Correspondence: Retiring statistical significance would give bias a free pass. *Nature*, 567, 461. <https://doi.org/10.1038/d41586-019-00969-2>

-Mayo, DG. (2019), P-value thresholds: Forfeit at your peril. *Eur J Clin Invest*, 49: e13170. doi: 10.1111/eci.13170

## Information Items for SIST

-References: Captain's **Bibliography**

-**Souvenirs**

-**Summaries of 16 Tours (abstracts & keywords)**

-**Excerpts & Mementos on Error Statistics Philosophy Blog**

(I will link to items from excerpted proofs for interested blog followers as we proceed)

-**Schaum's Appendix 2: Areas Under the Standard Normal Curve from 0-Z**

**DELAYED: JUNE 19-20 Workshop: The Statistics Wars and Their Casualties**