

**Wolpert, David H.**

**The bootstrap is inconsistent with probability theory.** (English) [Zbl 0886.62005](#)

Hanson, Kenneth M. (ed.) et al., Maximum entropy and Bayesian methods. Proceedings of the 15th international workshop, Santa Fe, NM, USA, July 31–August 4, 1995. Dordrecht: Kluwer Academic Publishers. Fundam. Theor. Phys. 79, 69-76 (1996).

Summary: This paper proves that for no prior probability distribution does the bootstrap (BS) distribution equal the predictive distribution, for all Bernoulli trials of some fixed size. It then proves that for no prior will the BS give the same first two moments as the predictive distribution for all size trials. It ends with an investigation of whether the BS can get the variance correct.

For the entire collection see [\[Zbl 0855.00029\]](#).

**MSC:**

[62A01](#) Foundations and philosophical topics in statistics

Cited in **1** Document

**Keywords:**

standard distribution; standard error; predictive distribution; error bars; bootstrap; Bernoulli trials