SEBASTIAN JESTER

Fermilab

"Statistics in Astronomy: Finding and Counting What's Out There"

MONDAY June 6, 2005 at 4:00 PM 133 Eckhart Hall, 5734 S. University Avenue

Refreshments following the seminar in Eckhart 110.

ABSTRACT

Astronomers need statistical tools at every step of their work, from detection of astronomical sources to the identification and characterisation of source populations. Astronomers face a special challenge compared to other natural scientists, because they cannot tweak the properties of the experimental apparatus, which is the Universe itself. Therefore, accounting for what we do not know is particularly important in astronomy. However, much of this accounting is being done with century-old statistical methods. I will describe some questions arising from work on black holes in the Sloan Digital Sky Survey which would benefit from more interaction between astronomers and statisticians.