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Seminar

Improved Inference for the Signal Significance

Igor Volobouev | Texas Tech University

**October 14, 2019 - 12.30 p.m.
room Benvenuti - Campus S. Caterina**

Improved Inference for the Signal Significance

Igor Volobouev

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We present a method for deriving signal significance p-values in the 5 sigma region for finite samples, to order $O(n^{-5/2})$, for a number of signal detection statistics (Wald, score, and likelihood ratio). Connection with the look elsewhere effect is discussed.

The talk is based in part on the article by I. Volobouev and A. Trindade 2018 JINST 13 P12011