

# THE TRANSFORM BETWEEN THE SPACE OF OBSERVED VALUES AND THE SPACE OF POSSIBLE VALUES OF THE PARAMETER

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## Abstract

In ref [1] the notion of statistically dual distributions is introduced. The reconstruction of confidence density [2] for the location parameter for several pairs of statistically dual distributions (Poisson and Gamma, normal and normal, Cauchy and Cauchy, Laplace and Laplace) in the case of single observation of the random variable is unique. It allows to introduce the Transform between the space of observed values and the space of possible values of the parameter.

## References:

- [1] S.I. Bityukov et al. e-Print: math.ST/0411462; S.I. Bityukov et al.  
Proc. of Conf. PhyStat'05, <http://www.physics.ox.ac.uk/phystat05/proceedings/>
- [2] S.I. Bityukov et al., AIP Conf.Proc. 803 (2005) 398-402

Key Words: Uncertainty, Measurement, Estimation