

**Comments on *A new model for statistical error analysis in XAS: about the distribution function of the absorption coefficient* by E. Curis & S. Bénazeth (2001). *J. Synchrotron Rad.* **8**, 264–266**Saralees Nadarajah<sup>a\*</sup> and Samuel Kotz<sup>b</sup>

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The recent paper by Curis & Bénazeth (2001) considers modeling of the experimental distribution of the absorption coefficient. As a preamble to this, the authors consider the exact law of the quotient of two independent normal random variables. They claim to have derived the exact law, it being a ‘quite long and complex’ expression not given in the paper. In fact, the problem of the quotient of two independent or dependent normal random variables was considered in the 1960s by Marsaglia (1965) and Hinkley (1969). Both these papers provide neat and compact expressions for the exact law of the ratio. So, we are somewhat surprised by the claim by Curis & Bénazeth (2001). For completeness, we would like to add that Yatchew (1986) has recently extended the work of Marsaglia (1965) and Hinkley (1969) to the multivariate case.

The purpose of this correspondence is not just to correct the mistake. We feel the references mentioned above can help the readers and authors of this journal in making appropriate choices with regard to similar modeling problems. It will also help to prevent similar mistakes in the future.

**References**

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