

## **ON A NEWSYMMETRIC $f$ - DIVERGENCE**

**K. C. JAIN, AMIT SRIVASTAVA AND RUCHI MATHUR**

### **Abstract**

The concept of  $f$  - divergences was introduced by Csisz'ar as measures of the 'hardness' of testing problem depending on a convex real valued function  $f$  on the interval  $(0, \infty)$ . The choice of this parameter can be adjusted so as to match the needs for specific applications. In the present work, we have proposed a new divergence measure, which belongs to the family of  $f$  -divergences. The importance of this measure in information theory has been discussed. Finally the proposed measure is compared with some well known symmetric divergence measures.