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On A Symmetric Divergence Measure and Information Inequalities

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Abstract: A non-parametric symmetric measure of divergence which belongs to the family of Csiszár's f -divergences is proposed. Its properties are studied and bounds in terms of some well known divergence measures obtained. An application to the mutual information is considered. A parametric measure of information is also derived from the suggested non-parametric measure. A numerical illustration to compare this measure with some known divergence measures is carried out.



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