Blended ϕ -divergences with Examples.

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Abstract: Several new examples of divergences emerged in the recent literature called blended divergences. Mostly these examples are constructed by the modification or parametrization of the old well-known phi-divergences. Newly introduced parameter is often called blending parameter. In this paper we present compact theory of blended divergences which provides us with a generally applicable method for finding new classes of divergences containing any two divergences D_0 and D_1 given in advance. Several examples of blends of well-known divergences are given.

Keywords: divergences of probability distributions; blended divergences; statistical applications;

AMS Subject Classification: 62B10; 62F35; 62G35;