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ON A PROPERTY OF THE LEGENDRE TRANSFORM

A. A. Mogul'skiĭ

For a pair of convex lower semicontinuous functions connected by the Legendre transform, we establish that their derivatives are mutually inverse functions (in the generalized sense).

Key words and phrases: deviation rate function, logarithm of the Laplace transform, Legendre transform, generalized inverse function.

$Mogul'skij\ Anatolij\ Al'fredovich$

Sobolev Institute of Mathematics, Novosibirsk, 630090 Russia. Novosibirsk State University, Novosibirsk, 630090 Russia. E-mail: mogul@math.nsc.ru Received May 3, 2016

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