

Φ -moment martingale inequalities on variable Lorentz–Karamata spaces

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Abstract. In this paper, with the help of some new atomic decomposition theorems, some Φ -moment martingale inequalities associated with concave functions in the context of Lorentz–Karamata spaces with variable exponents are deduced. Our results extend some existing results in variable martingale Hardy–Lorentz–Karamata spaces and various classical martingale Hardy spaces.

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