

**Note on a paper by Bordellès, Dai, Heyman,
Pan and Shparlinski, 3**

By BIN CHEN (Weinan), JIE WU (Créteil) and FENG ZHAO (Zhengzhou)

Abstract. Denote by $[t]$ the integral part of t . Under some simple hypothesis on the growth of arithmetic function f , we prove asymptotic formulas for

$$S_f(x) := \sum_{n \leq x} f\left(\left[\frac{x}{n}\right]\right)$$

as $x \rightarrow \infty$ and give some applications. These improve or generalize some recent results of Zhao and Wu.

BIN CHEN
SCHOOL OF MATHEMATICS
AND STATISTICS
WEINAN NORMAL UNIVERSITY
WEINAN, SHAANXI 714099
P. R. CHINA

JIE WU
CNRS LAMA 8050
LABORATOIRE D'ANALYSE ET
DE MATHÉMATIQUES APPLIQUÉES
UNIVERSITÉ PARIS-EST CRÉTEIL
94010 CRÉTEIL CEDEX
FRANCE

FENG ZHAO
DEPARTMENT OF MATHEMATICS
AND STATISTICS
NORTH CHINA UNIVERSITY OF
WATER RESOURCES AND
ELECTRIC POWER
JINSHUI E ROAD
ZHENGZHOU, HENAN, 450046
P. R. CHINA

Mathematics Subject Classification: 11A25, 11N36, 11N37.

Key words and phrases: divisor function, integral part, asymptotic formula.