Year: 2010 | **Vol.: 77** | **Fasc.: 1-2**

Title: Stability of the entropy equation

Author(s): Eszter Gselmann

In this paper we prove that the so-called entropy equation, i.e.,

$$H(x,y,z) = H(x+y,0,z) + H(x,y,0)$$

is stable in the sense of Hyers and Ulam on the positive cone of $\mathbb{R}^3$, assuming that the function H is approximatively symmetric in each variable and approximatively homogeneous of degree α, where α is an arbitrarily fixed real number.

Address:
Eszter Gselmann
Institute of Mathematics
University of Debrecen
H-4010 Debrecen, P.O. Box 12
Hungary