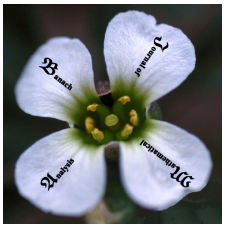

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ON THE MODIFIED ENTROPY EQUATION

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Abstract. The object of this paper is to solve the so–called modified entropy equation

$$f(x,y,z) = f(x,y+z,\mathbf{0}) + \mu(y+z)\, f\left(\mathbf{0}, \frac{y}{y+z}, \frac{z}{y+z}\right),$$

on the positive cone of $\mathbb{R}^k$, where μ is a given multiplicative function on this cone. After that the regular solutions of this equation are determined. Furthermore we investigate its connection between the entropy equation and other equations, as well.

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