

Authors' note on the paper:

Instability of low density supersonic waves of a viscous isentropic gas flow through a nozzle

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After the paper was accepted, C.-H. Hsu and T.-S. Yang pointed out to us that the expression for w_1 in display (29) is wrong and it should be $w_1 = 0$. We then found an error in our calculation and, indeed, $w_1 = 0$. This error affects the claimed main result (Theorem 5.1) since the proof of Lemma 5.3 in the paper relies on the wrong expression (29) for the term w_1 . At this moment, we could not prove Theorem 5.1 with $w_1 = 0$ and we do not know if the statement in Theorem 5.1 is correct or not.

Also, the following corrections should be made due to this error:

1. Relative parts on w_1 in Lemma 4.1 should be changed with the statement $w_1 = 0$.
2. Lemma 4.2 should be changed to:

Lemma 4.2. *For every non-transonic wave $(\bar{\rho}, \bar{u})$, all eigenvalues are pure imaginary.*

3. In the proofs of Lemmas 4.2 and 4.3, one uses $w_1 = 0$ at relevant places and the rest remains the same.