

**Full Title of Your Paper**

Peng Shi<sup>1</sup>, Yuanqing Xia<sup>1,\*</sup> and Junhu Ruan<sup>2</sup>

<sup>1</sup>School of Technology  
University of Glamorgan  
Pontypridd, Wales, CF37 1DL, United Kingdom  
pshi@glam.ac.uk; \*Corresponding author: yxia@glam.ac.uk

<sup>2</sup>College of Economics and Management  
Northwest A&F University  
Yangling 712100, P. R. China

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ABSTRACT. *Please write down the abstract of your paper here....*

**Keywords:** Please write down the keywords of your paper here, such as, Intelligent information, System control

1. **Introduction.** Please write down the Introduction of your paper here....

2. **Problem Statement and Preliminaries.** Please write down your section. When you cite some references, please give numbers, such as, ... In the work of [1-3,5], the problem of... For more results on this topic, we refer readers to [1,4,5] and the references therein....

Examples for writing definition, lemma, theorem, corollary, example, remark.

**Definition 2.1.** *System (1) is stable if and only if...*

**Lemma 2.1.** *If system (1) is stable, then...*

**Theorem 2.1.** *Consider system (1) with the control law...*

**Proof:** Let...

**Corollary 2.1.** *If there is no uncertainty in system (1), i.e.,  $\Delta A = 0$ , then...*

**Remark 2.1.** *It should be noted that the result in Theorem 2.1...*

**Example 2.1.** *Let us consider the following example...*

$$\ddot{y} x(t) = Ax(t) + Bu(t) + B_1w(t) \tag{1}$$

$$y(t) = Cx(t) + Du(t) + D_1w(t) \tag{2}$$

.....

3. **Main Results.** Here are the main results in this paper...

**Definition 3.1.** *System (3) is stable if and only if...*

**Lemma 3.1.** *If system (3)-(4) is stable, then...*

$$\ddot{y} x(t) = Ax(t) + Bu(t) + B_1w(t) \tag{3}$$

$$y(t) = Cx(t) + Du(t) + D_1w(t) \tag{4}$$

**Theorem 3.1.** *Consider system (3) with the control law...*

**Proof:** Let...

**Corollary 3.1.** *If there is no uncertainty in system (3), i.e.,  $\Delta A = 0$ , then...*

**Remark 3.1.** *It should be noted that the result in Theorem 3.1...*

**Example 3.1.** *Let us consider the following example...*

TABLE 1. Fuzzy rule table by FSTRM

$x_1/ x_2$	$A_{21}$	...	$A_{2j}$	...	$A_{2k}$
$A_{11}$	$w_1/y_1$	...	$w_j/y_j$	...	$w_k/y_k$
$A_{12}$	$w_{k+1}/y_{k+1}$	...	$w_{k+j}/y_{k+j}$	...	$w_{2k}/y_{2k}$
...			...		
$A_{1i}$	...	...	$w_{(i-1)k+j}/y_{(i-1)k+j}$	...	
...			...		
$A_{1r}$	$w_{(i-1)k+1}/y_{(r-1)k+1}$	...			$w_{rk}/y_{rk}$

4. **Control Design.** In this section, we present...

$$\ddot{y} x(t) = Ax(t) + Bu(t) + B_1w(t) \tag{5}$$

$$y(t) = Cx(t) + Du(t) + D_1w(t) \tag{6}$$

**Definition 4.1.** System (5) is stable if and only if...

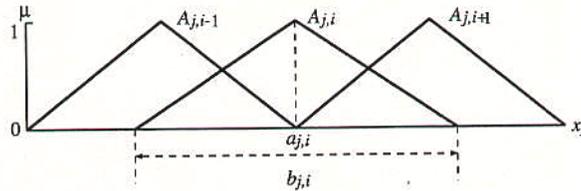


FIGURE 1. Triangular-type membership functions for  $x_j$

**Lemma 4.1.** If system (5) is stable, then...

**Theorem 4.1.** Consider system (5)-(6) with the control law...

**Proof:** Let....

**Corollary 4.1.** If there is no uncertainty in system (5)-(6), i.e.,  $\Delta A = 0$ , then...

**Remark 4.1.** It should be noted that the result in Theorem 2.1...

**Example 4.1.** Let us consider the following example...

.....

5. **Conclusions.** The conclusion of your paper is here...

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