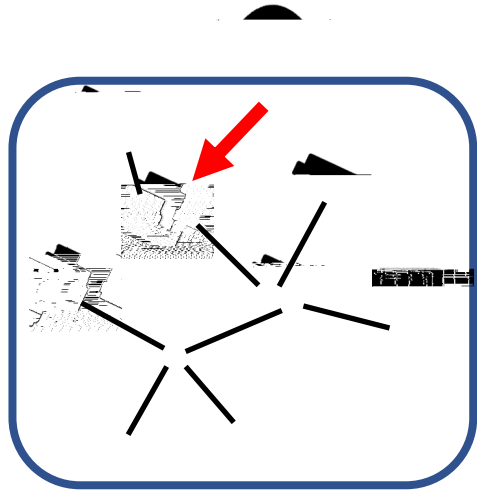


! " # \$ % & ' ( ) \* + , - . " # & / ) \$ % " 0 \$ 1 " 2 & \* 3 1 & " 4 \$ 3 / , - . "  
5 1 \$ / \$ \* \$ ' 6 " 7 8 " 2 5 9 : " ; , / ) " 2 / < / & " 2 = < \* & " 4 & % 3 \* / , \$ -

!"#\$%&' (#)%"

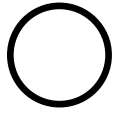


It is easy that an attacker in a propagation area of nodes receives and then analyzes packets and send malicious packeatece malicious attack is succceeded,ee(ε).Daein a case of black hole attacks,e an attacker can obtain sensingadata froa sensor nodes instead of reaching the data to sink nodes while commands from tha sink nodes are not reached to sensor node (ε).D QdConsequently,ecritical problems will occur in soaal activities of leT systems.

To p3(10).3(a)8(1)h(6).3(a).1(1)(6).3(is)3(ur)(53(e)(6).3(a)3)8(1)(10).3(3)3(a)8(1)32



! " # \$ % & ' ( ) \* + # '



! " # \$ % & ' ( ) \* + # '

!"#\$%&'%()\*+,-./0/1" 2/3/\*%

S	D
id: S, PC:0 pktr:(0,0,0,0,0,0,ri,sig()) pkts	

!"#\$%&'()\*&







