

# The Bounded Buffer Algorithm

```
--algorithm BChan{  
  variables  $in = Input, out = \langle \rangle, ch = \langle \rangle$  ;  
  process (  $Send = 0$  ) {  
    s: while ( TRUE ) {  
      await  $Len(ch) \neq N$  ;  
       $ch := Append(ch, IHead(in))$  ;  
       $in := ITail(in)$  } }  
  fair process (  $Rcv = 1$  ) {  
    r: while ( TRUE ) {  
      await  $Len(ch) \neq 0$  ;  
       $out := Append(out, Head(ch))$  ;  
       $ch := Tail(ch)$  } } }
```