

# Generierung des Eingangssingals für Barrier Bucket RF Systeme and der GSI



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  - Gerätekommunikation
  - Code
- 4** Ausblick

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# Problemstellung

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# Zielsetzung

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# Gegeben

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MLBS.py



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# Gegeben

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FFT.py

MLBS.py

# Gegeben

---

FFT.py

MLBS.py

getH.py

# Gegeben

---

FFT.py

MLBS.py

getH.py

computeUin.py



# Gegeben

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FFT.py

MLBS.py

getH.py

computeUin.py

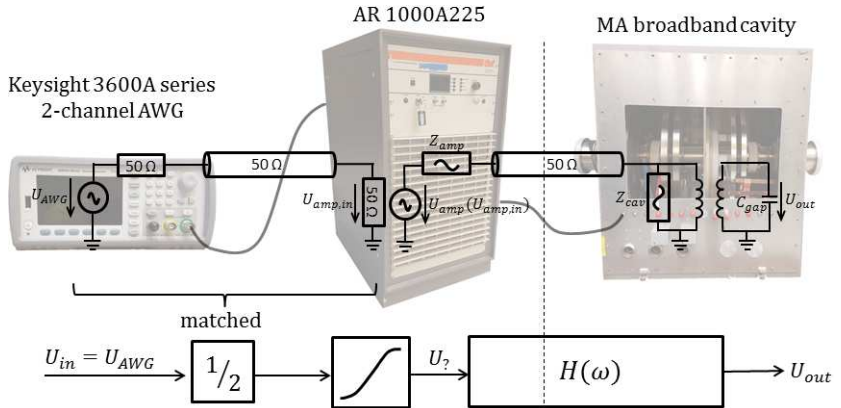
runme\_compute.py

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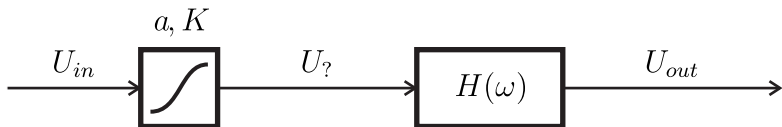
## Erreichtes: das VISA-Handbuch

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# Erreichtes: Code



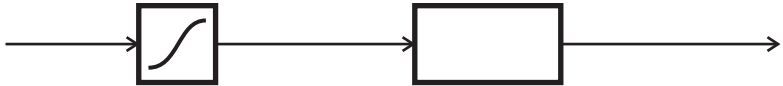
## Erreichtes: Code



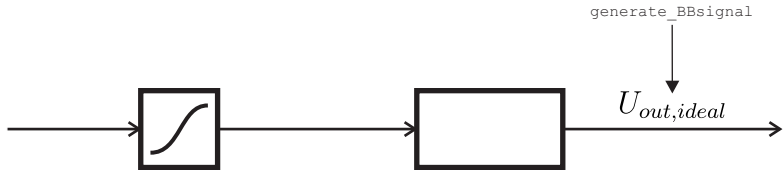
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## Erreichtes: Code

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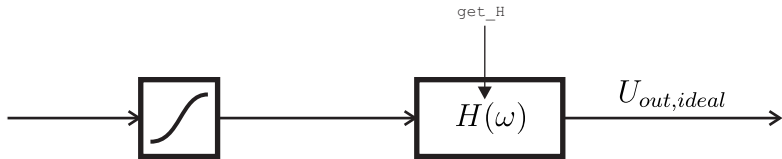


## Erreichtes: Code



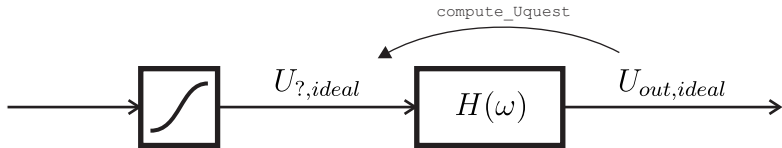
```
1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )
```

## Erreichtes: Code



```
1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )  
2 H = measure_H ( )
```

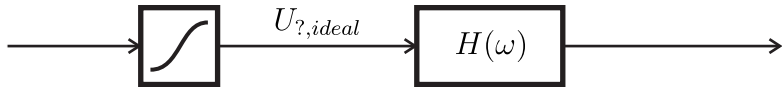
## Erreichtes: Code



```
1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )  
2 H = measure_H ( )  
3 Uquest_ideal = compute_Uquest ( Uout_ideal , H )
```



## Erreichtes: Code



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1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )  
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2 H = measure_H ( )  
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```

## Erreichtes: Code



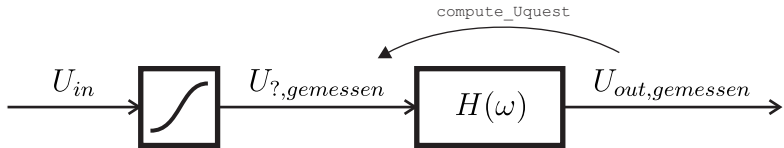
```
1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )  
2 H = measure_H ( )  
3 Uquest_ideal = compute_Uquest ( Uout_ideal , H )  
4 Uin = Uquest_ideal
```

## Erreichtes: Code



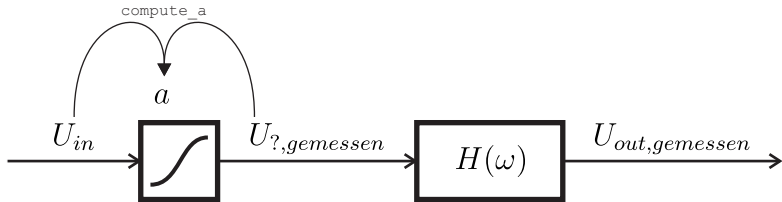
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1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )  
2 H = measure_H ( )  
3 Uquest_ideal = compute_Uquest ( Uout_ideal , H )  
4 Uin = Uquest_ideal  
5 Uout_measured = measure_Uout ( Uin )
```

## Erreichtes: Code



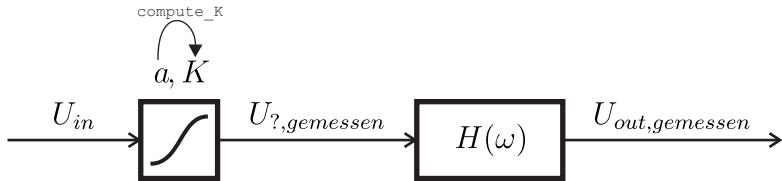
```
1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )  
2 H = measure_H ( )  
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4 Uin = Uquest_ideal  
5 Uout_measured = measure_Uout ( Uin )  
6 Uquest_measured = compute_Uquest ( Uout_measured , H )
```

## Erreichtes: Code



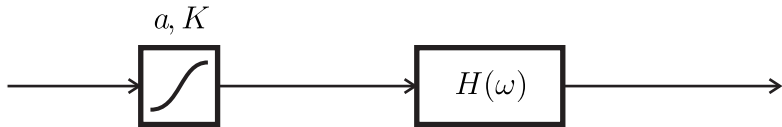
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1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )
2 H = measure_H ( )
3 Uquest_ideal = compute_Uquest ( Uout_ideal , H )
4 Uin = Uquest_ideal
5 Uout_measured = measure_Uout ( Uin )
6 Uquest_measured = compute_Uquest ( Uout_measured , H )
7 a = compute_a ( Uin , Uquest_measured , N )
```

## Erreichtes: Code



```
1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )
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4 Uin = Uquest_ideal
5 Uout_measured = measure_Uout ( Uin )
6 Uquest_measured = compute_Uquest ( Uout_measured , H )
7 a = compute_a ( Uin , Uquest_measured , N )
8 K = compute_K ( a )
```

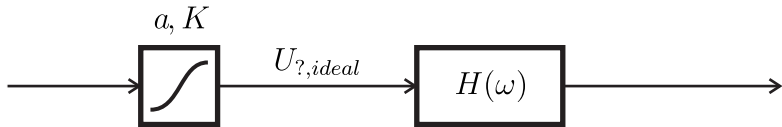
## Erreichtes: Code



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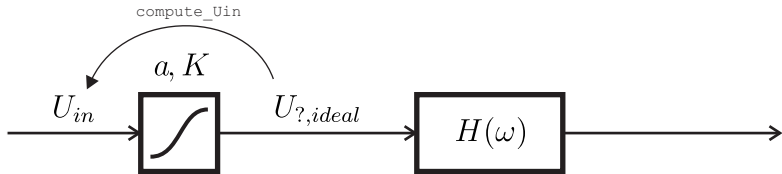


## Erreichtes: Code



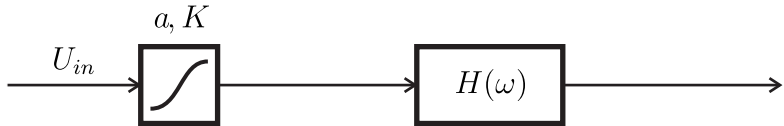
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5 Uout_measured = measure_Uout ( Uin )
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7 a = compute_a ( Uin , Uquest_measured , N )
8 K = compute_K ( a )
```

## Erreichtes: Code



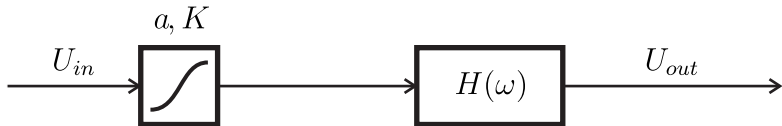
```
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5 Uout_measured = measure_Uout ( Uin )
6 Uquest_measured = compute_Uquest ( Uout_measured , H )
7 a = compute_a ( Uin , Uquest_measured , N )
8 K = compute_K ( a )
9 Uin = compute_Uin ( Uquest_ideal , K , Vpp )
```

## Erreichtes: Code



```
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## Erreichtes: Code



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5 Uout_measured = measure_Uout ( Uin )
6 Uquest_measured = compute_Uquest ( Uout_measured , H )
7 a = compute_a ( Uin , Uquest_measured , N )
8 K = compute_K ( a )
9 Uin = compute_Uin ( Uquest_ideal , K , Vpp )
10 Uout = measure_Uout ( Uin )
```



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# Evaluierung: Gerätekommunikation

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# Evaluierung: Python-Code für die nichtlinere Verzerrung

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# Ausblick

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