Generierung des Eingangssingals für Barrier Bucket RF Systeme and der GSI

TECHNISCHE UNIVERSITÄT DARMSTADT

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Projektseminar Beschleunigertechnik

Outline

1. Einführung
   - Problemstellung
   - Zielsetzung
   - Gegeben
2. Erreichtes
   - Gerätekommunikation
   - Code
3. Evaluierung
   - Gerätekommunikation
   - Code
4. Ausblick

Problemstellung

Zielsetzung

Gegeben

MLBS.py

Gegeben

FFT.py

MLBS.py

Gegeben

FFT.py

MLBS.py

getH.py

Gegeben

FFT.py

MLBS.py

getH.py

computeUin.py

Gegeben

FFT.py

MLBS.py

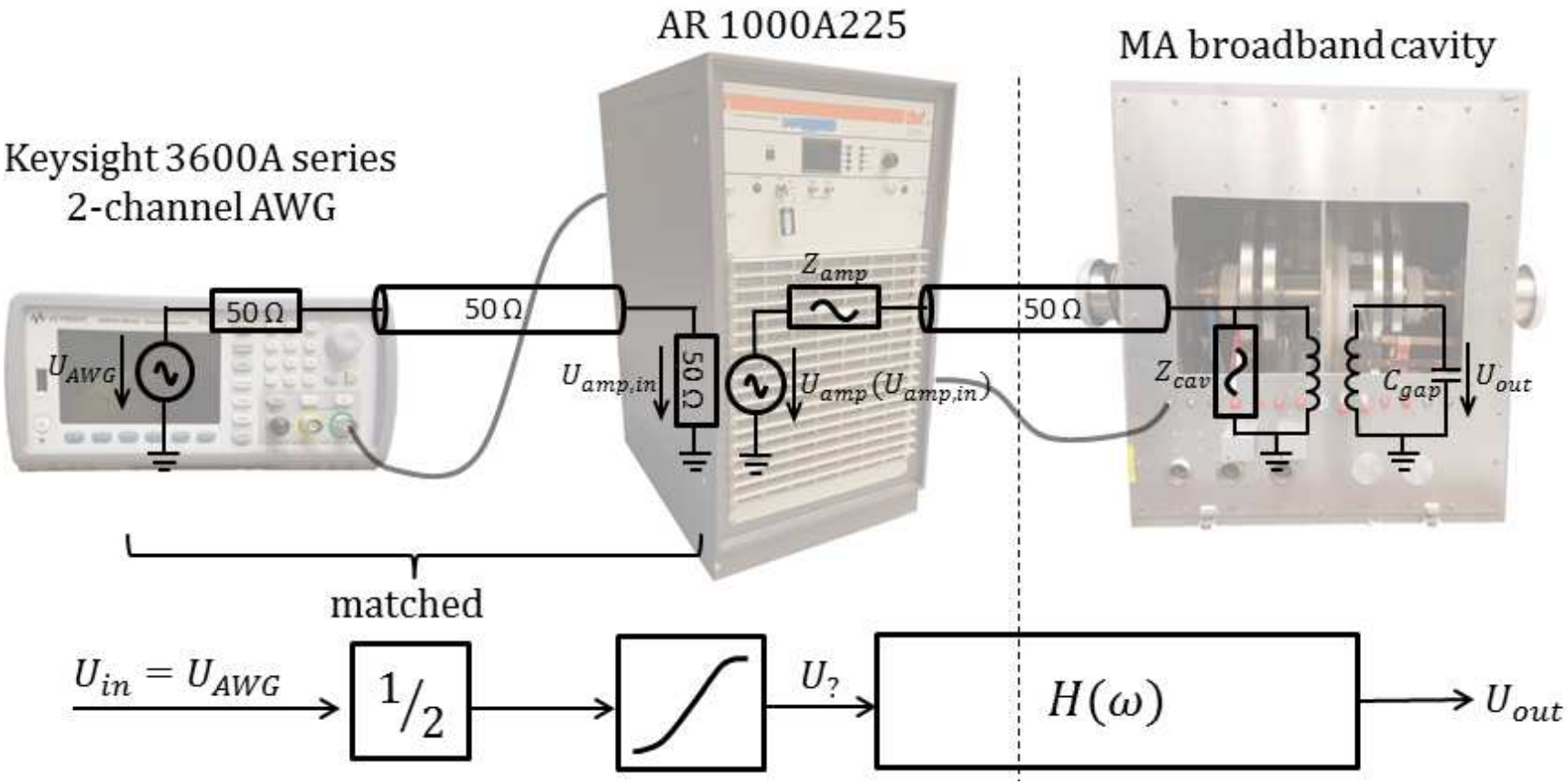
getH.py

computeUin.py

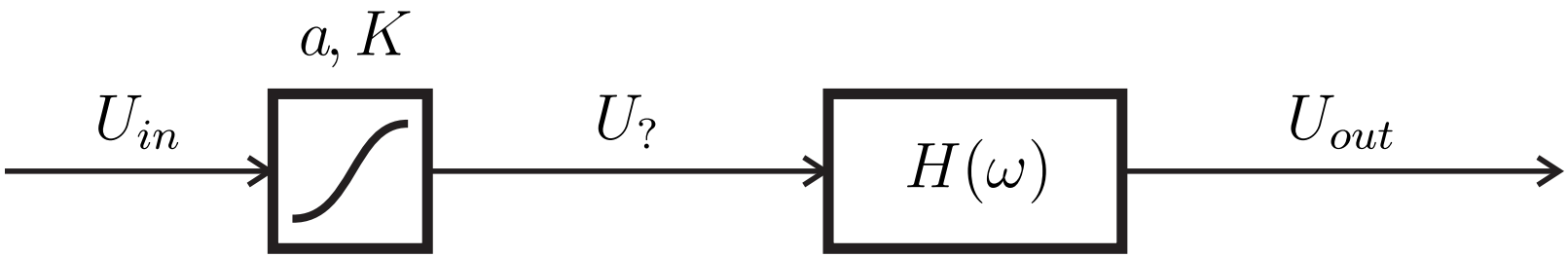
runme_compute.py

Erreichtes: das VISA-Handbuch

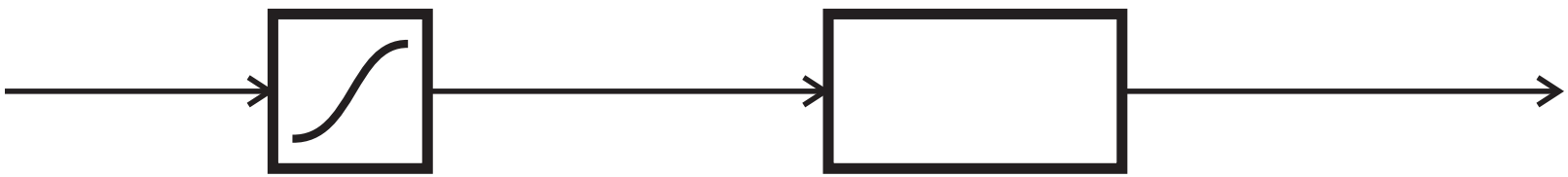
Erreichtes: Code



Erreichtes: Code



Erreichtes: Code



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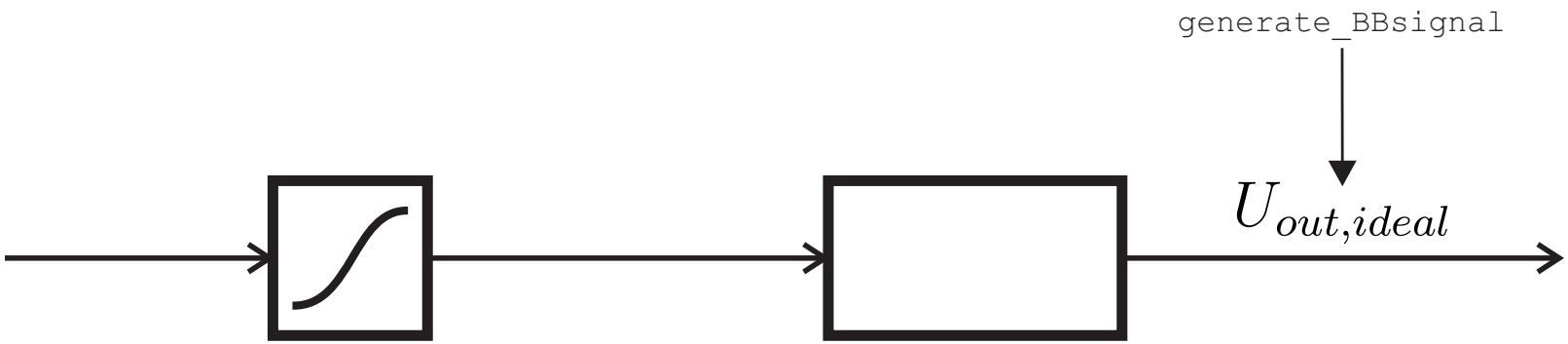


```
1 Uout_ideal = generate_BBsignal ( fq_rep , fq_bb , vpp )
```

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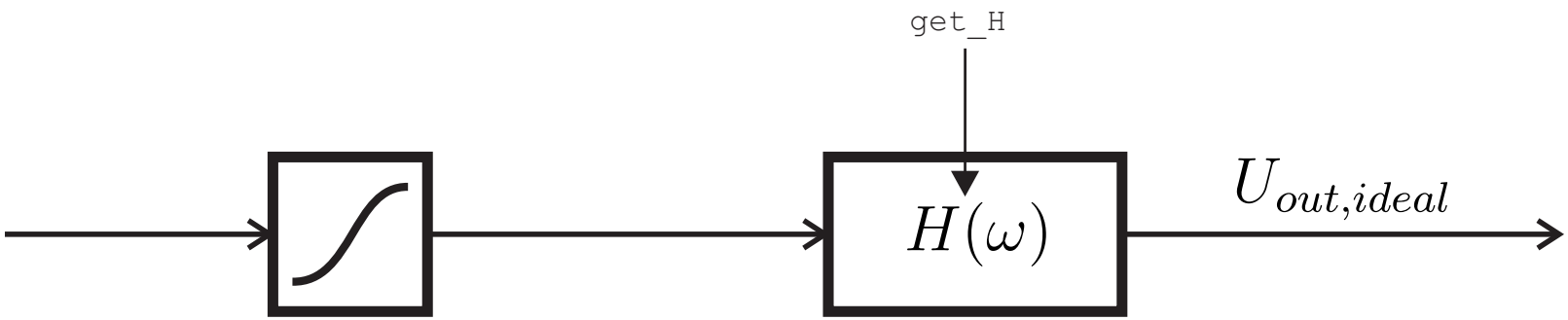


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1 Uout_ideal = generate_BBsignal ( fq_rep, fq_bb, vpp )
2 H = measure_H ( )
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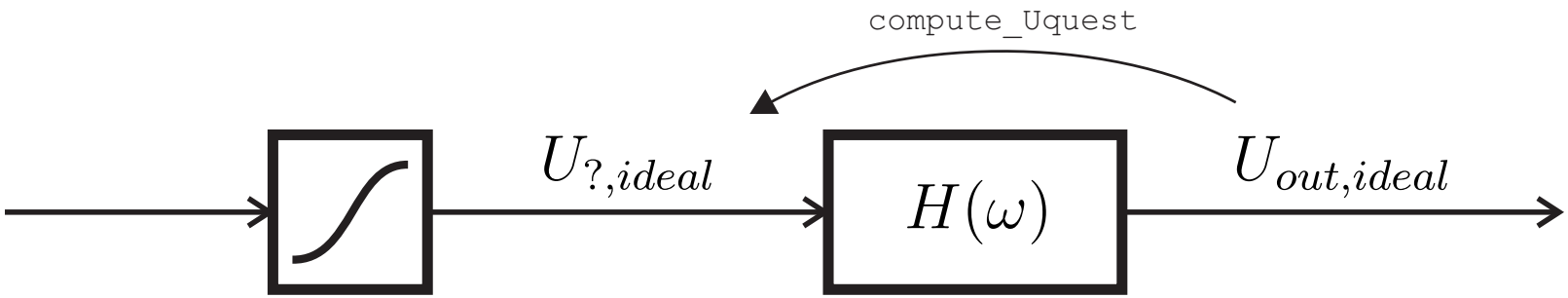


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1 Uout_ideal = generate_BBsignal ( fq_rep, fq_bb, vpp )
2 H = measure_H ( )
3 Uquest_ideal = compute_Uquest ( Uout_ideal, H )
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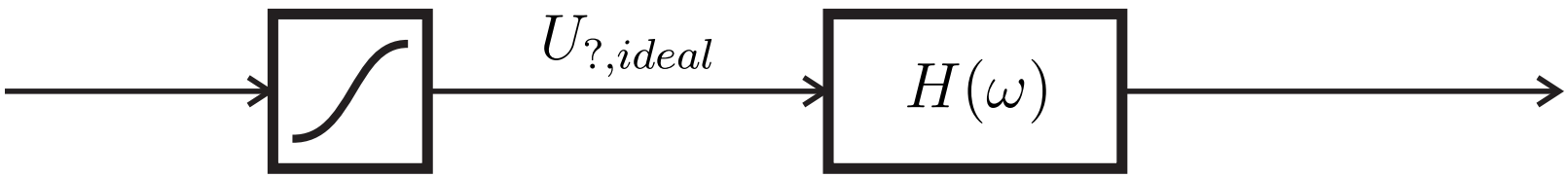


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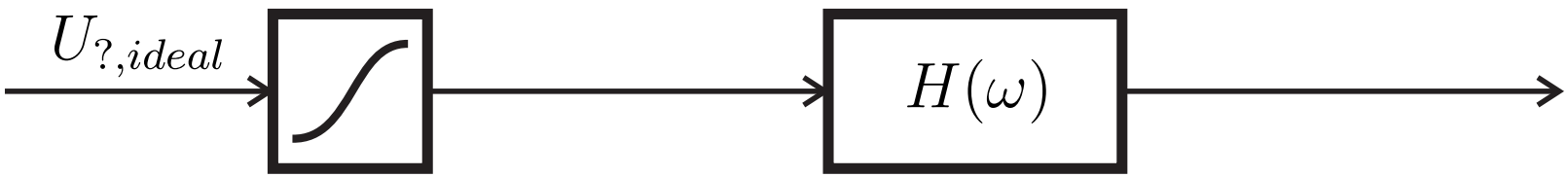


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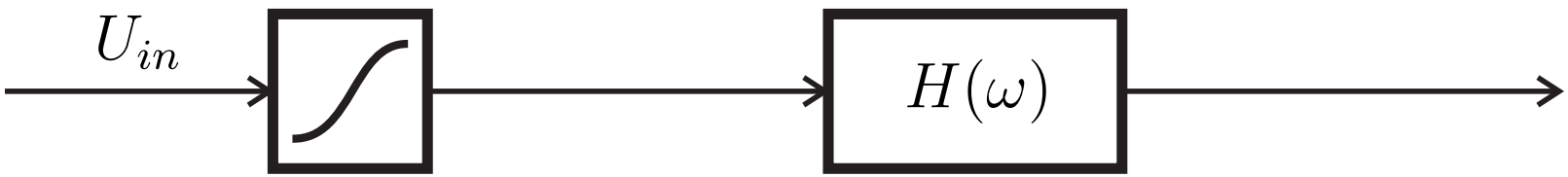


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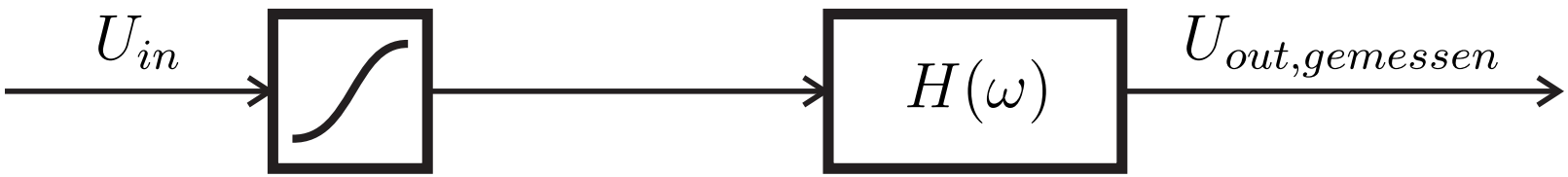
Erreichtes: Code

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5 Uout_measured = measure_Uout ( Uin )
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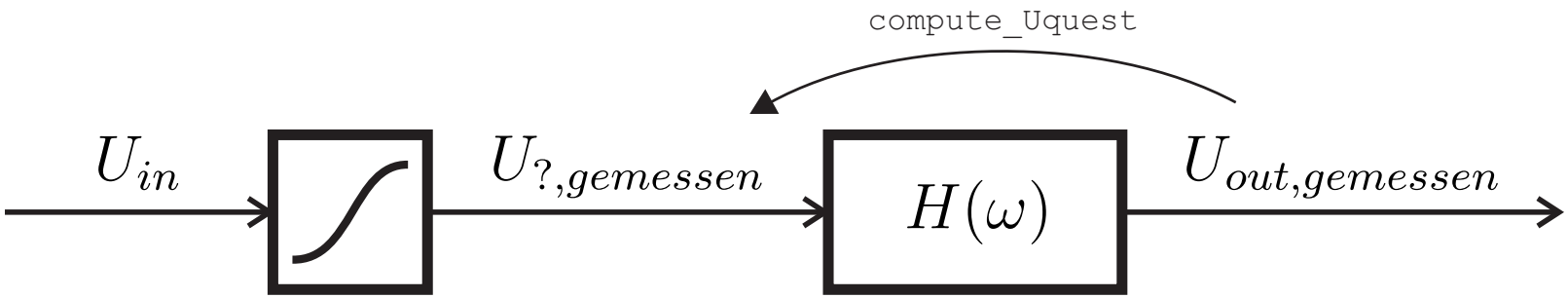
Erreichtes: Code

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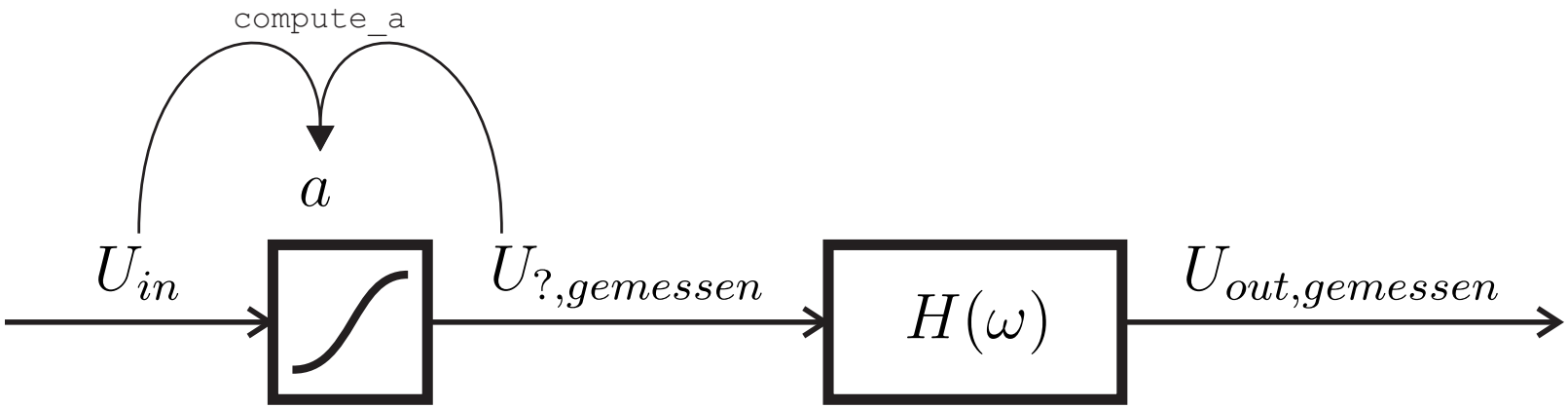


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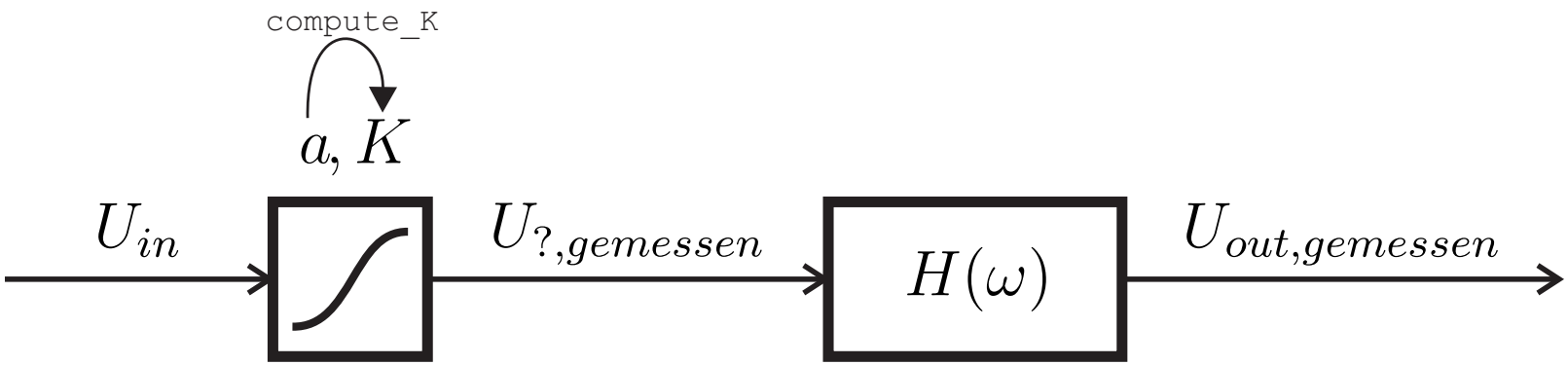
5 Uout_measured = measure_Uout ( Uin )
6 Uquest_measured = compute_Uquest ( Uout_measured, H )
7 a = compute_a ( Uin, Uquest_measured, N )
```

Erreichtes: Code

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7 a = compute_a ( Uin, Uquest_measured, N )
8 K = compute_K ( a )
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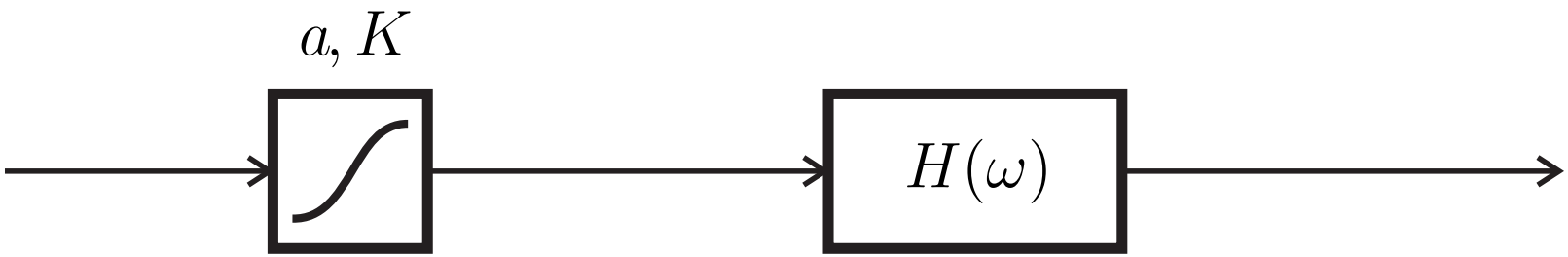
Erreichtes: Code

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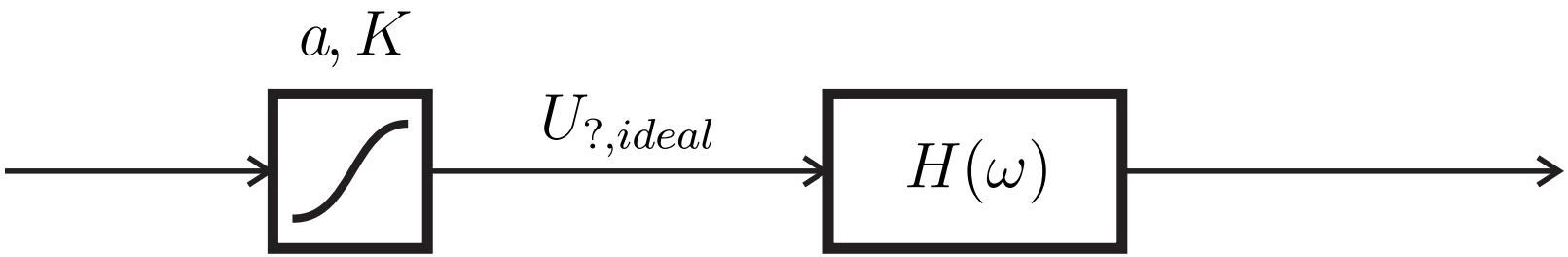


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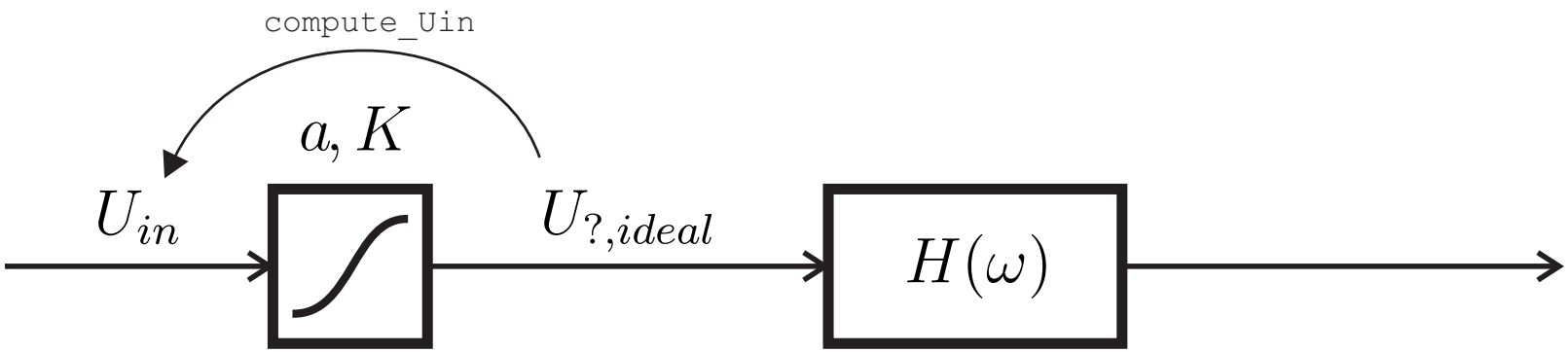


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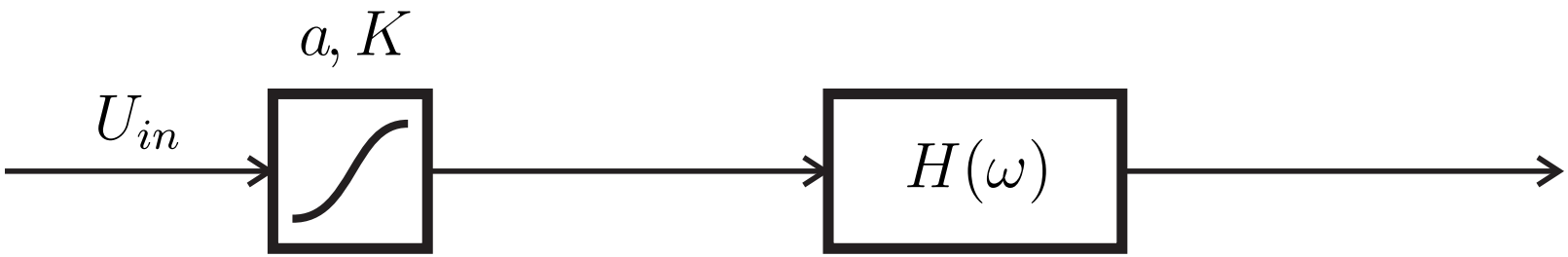
8 K = compute_K ( a )
9 Uin = compute_Uin ( Uquest_ideal, K )
```

Erreichtes: Code

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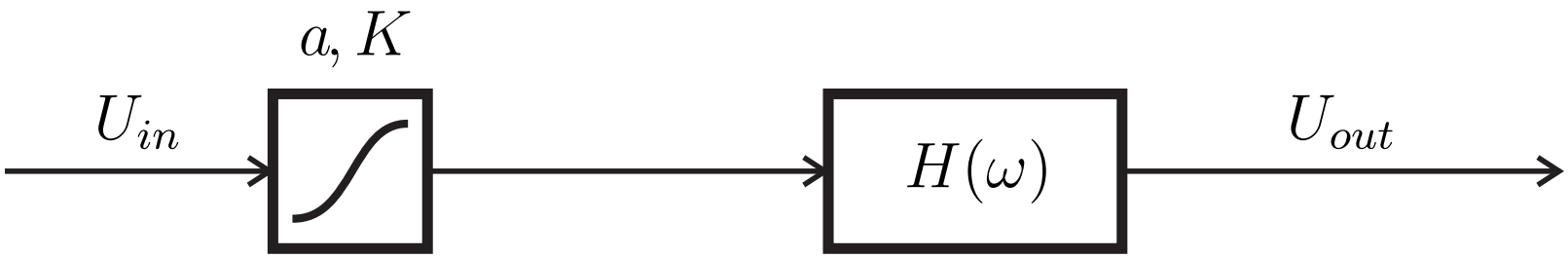


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8  K = compute_K ( a )
9  Uin = compute_Uin ( Uquest_ideal, K )
10 Uout = measure_Uout ( Uin )
```

Evaluierung: Gerätekommunikation

Evaluierung: Python-Code für die nichtlinere Verzerrung

Ausblick