

# rechnung\_nichtinvertierender\_verstaerker

## Student Group

| First Name | Surname | Matrikel Nr. |
|------------|---------|--------------|
|            |         |              |
|            |         |              |
|            |         |              |

## Table of Contents

### $\S 1.$ Betrachtung der Ströme

|                                  |                                                                                           |                                                                             |
|----------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| aus (2+3)                        | $\text{\color{blue}\{I_p\}} = \text{\color{blue}\{I_m\}} = 0 \$$                          | $I_p \$$ und $I_m \$$ sind damit definiert                                  |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| aus (6)                          | $\text{\color{blue}\{I_o\}} = I_1 \$$                                                     | $I_o \$$ ist damit bekannt, wenn $I_1 \$$ bekannt ist                       |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| aus (7) und (3)                  | $I_1 - I_2 - \text{\color{blue}\{I_o\}} = 0 \$$                                           | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| $\frac{d}{dt} \int_V \rho \, dV$ | $I_1 = I_2 = I_o \$$                                                                      | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\text{\color{blue}\{I_1\}} = \text{\color{blue}\{I_2\}} = \text{\color{blue}\{I_o\}} \$$ | mit (8) und (9): $I_{\boxed{}} = \frac{U_{\boxed{}}}{R_{\boxed{}}}$ und (5) |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{I_1}{R_1} = \frac{I_2}{R_2} = \frac{I_{\boxed{}}}{R_{\boxed{}}} = I_{\boxed{}} \$$ | Spannungsteilerformel, $I_{\boxed{}} = \text{const.} \$$                    |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |
| (10)                             | $U_2 = U_1 \cdot \frac{R_2}{R_1 + R_2} \$$                                                | Spannungsteilerformel                                                       |
| $\frac{d}{dt} \int_V \rho \, dV$ | $\frac{d}{dt} \int_V \rho \, dV$                                                          | $\frac{d}{dt} \int_V \rho \, dV$                                            |

## \$II.\quad\$ Betrachtung der Spannungsverstärkung

[illegible]

From: <https://wiki.mexle.te.hs-heilbronn.de/> - **MEXLE Wiki**

Permanent link:  
[https://wiki.mexle.te.hs-heilbronn.de/elektronische\\_schaltungstechnik/rechnung\\_nichtinvertierender\\_verstaerker?rev=1620551707](https://wiki.mexle.te.hs-heilbronn.de/elektronische_schaltungstechnik/rechnung_nichtinvertierender_verstaerker?rev=1620551707)

Last update: **2021/05/09 11:15**

