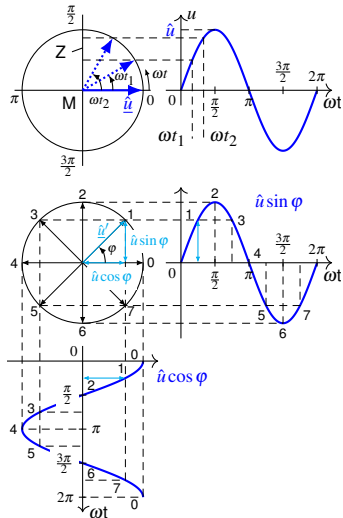
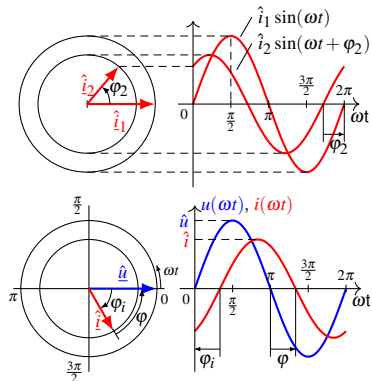


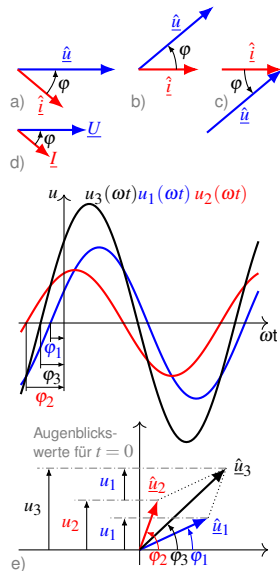
# Zeigerdiagramm I



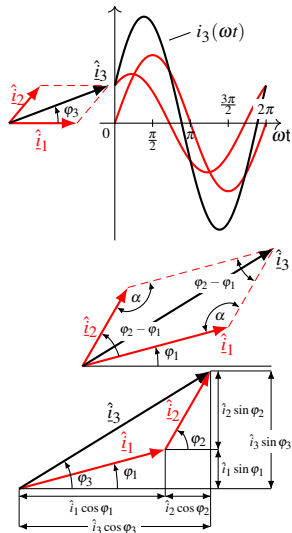
# Zeigerdiagramm II



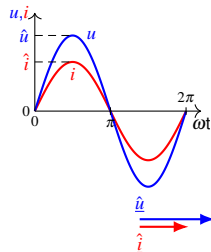
# Zeigerdiagramm III



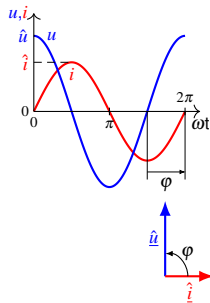
# Zeigerdiagramm IV



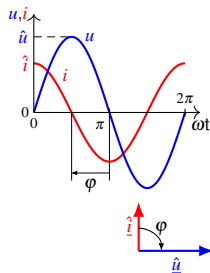
# Widerstand im Wechselstromkreis



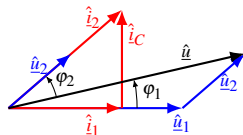
# Induktivität im Wechselstromkreis



# Kondensator im Wechselstromkreis

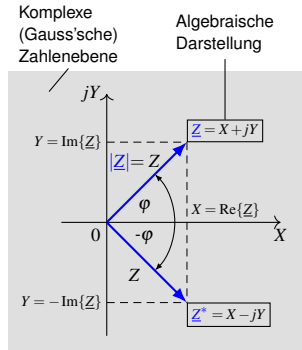


# Beispiel - Konstruktion eines Zeigerdiagramms

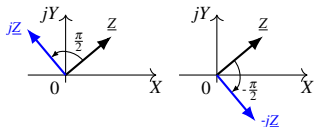
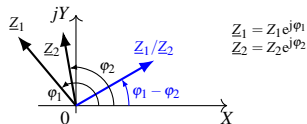
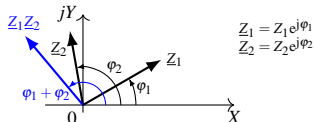
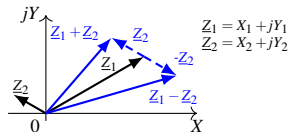




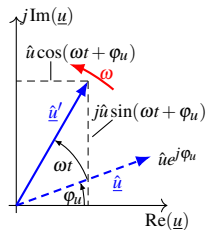
# Grundbegriffe der komplexen Rechnung



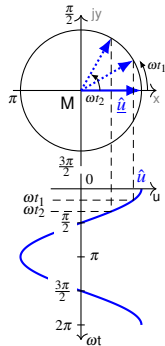
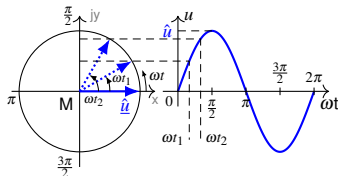
# Rechenoperationen mit komplexen Zahlen



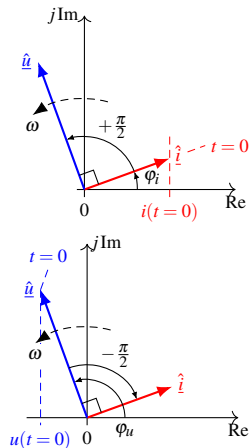
# Komplexe Wechselstromrechnung



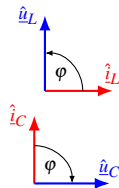
# Zeiger für komplexe Wechselstromrechnung



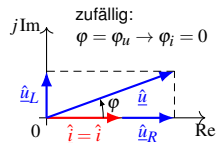
# Strom-Spannungsbeziehung für Induktivität



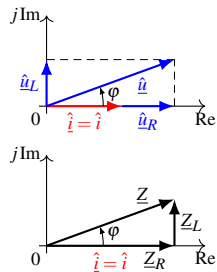
# Strom-Spannungsbeziehung im Bildbereich



# Komplexe Wechselstromrechnung - Beispiel II

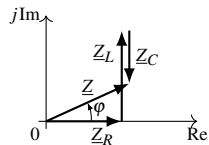
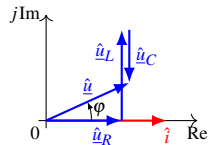


# Strom-Spannungs- und Widerstands Diagramm

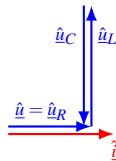




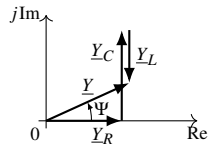
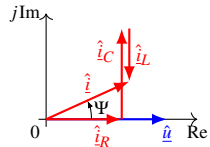
# RLC-Serienschwingkreis



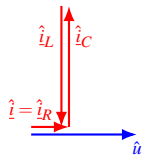
# Serienschwingkreis - Bauelementespannungen I



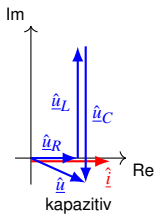
# Parallelschwingkreis



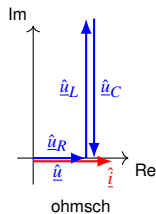
# Parallelschwingkreis - Bauelementeströme I



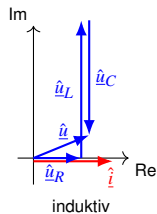
# Zeigerdiagramme für Serien-/Parallelschwingkreis



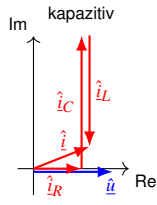
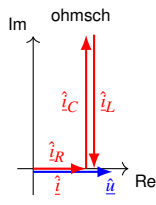
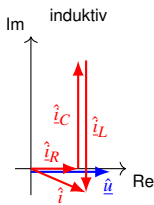
$$f < f_{res}$$



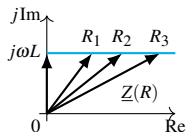
$$\text{Resonanzfall } f = f_{res}$$



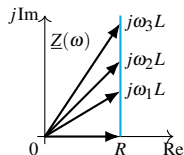
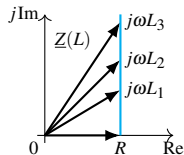
$$f > f_{res}$$



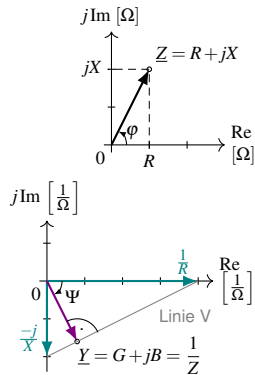
# Impedanz RL-Reihenschaltung - R variabel



# Impedanz RL-Reihenschaltung - $L/\omega$ variabel

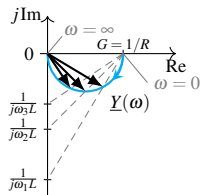
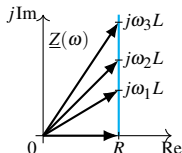
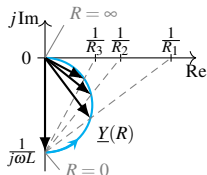
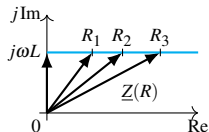


# Ortskurve Admittanz: Inversion der Impedanz

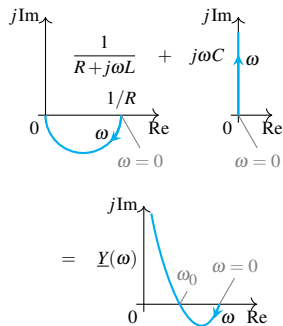




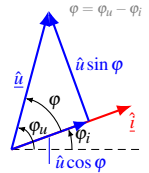
# Admittanz $RL$ -Reihenschaltung – $R$ & $\omega$ variabel



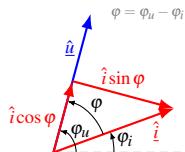
# Ortskurven von komplizierten Netzwerken I



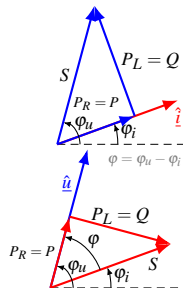
# Leistung im Wechselstromkreis - $RL$ -Schaltung I



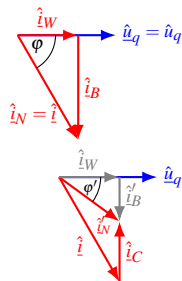
# Leistung im Wechselstromkreis - $RL$ -Schaltung II



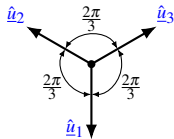
# Scheinleistung



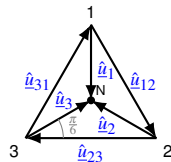
# Blindstrom-/leistungskompensation I



# Dreiphasensystem – Sternschaltung I

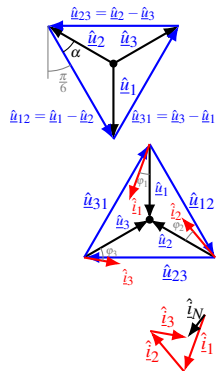


# Dreiphasensystem – Sternschaltung II

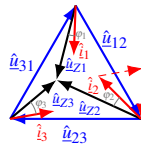
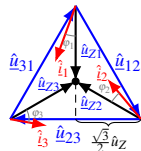




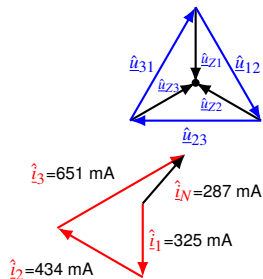
# Leistungsberechnung im Drehstromsystem



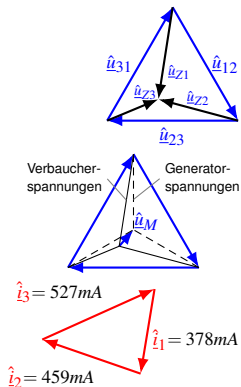
# Sternschaltung mit / ohne Sternpunkt



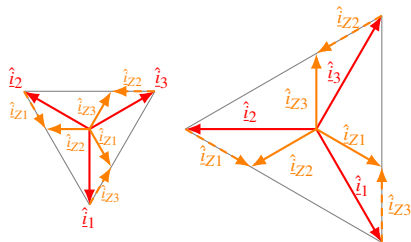
# Drei-/Vierleitersystem - Beispiel I



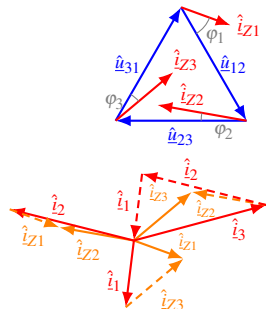
# Drei-/Vierleitersystem - Beispiel II



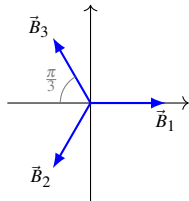
# Ergänzung: Leistung bei Dreieckschaltung



# Leistungsberechnung bei Dreieckschaltung II



# Erzeugung Drehfeld II



# Erzeugung Drehfeld III

