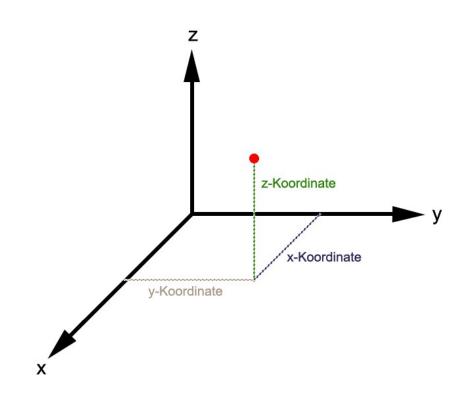
## Einführung

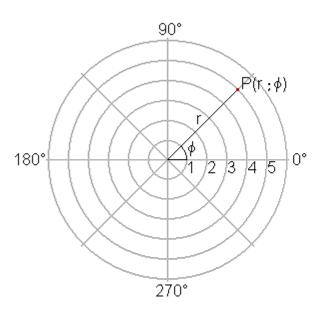
Koordinatensysteme

Meshgrids

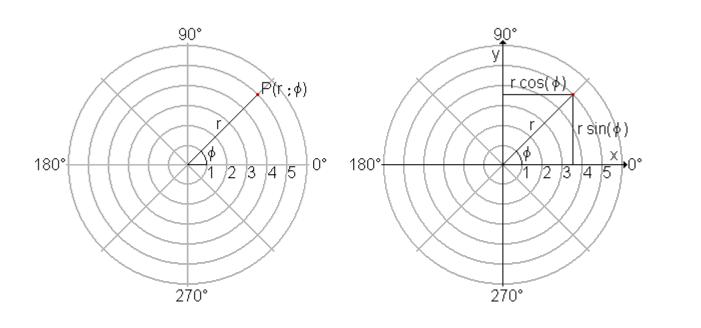
#### Kartesische Koordinaten



#### Polarkoordinaten

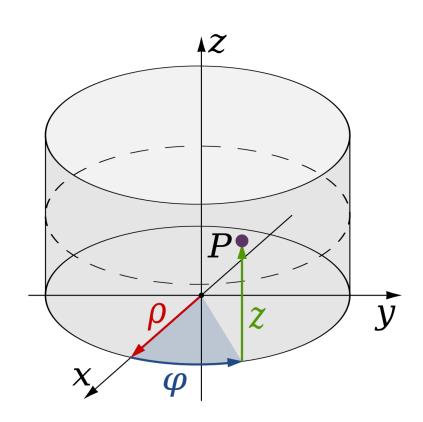


#### Polarkoordinaten



$$x = r\cos\varphi$$
$$y = r\sin\varphi$$

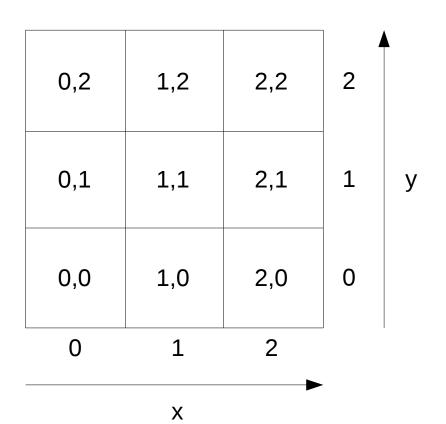
## Zylinderkoordinaten



$$x = \rho \cos \varphi$$
$$y = \rho \sin \varphi$$
$$z = z$$

| 0,2 | 1,2 | 2,2 | 2 |   |
|-----|-----|-----|---|---|
| 0,1 | 1,1 | 2,1 | 1 | у |
| 0,0 | 1,0 | 2,0 | 0 |   |
| 0   | 1   | 2   |   |   |
| X   |     |     |   |   |

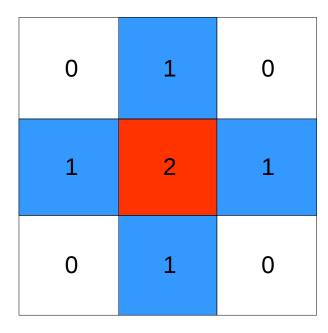
- Diskretisierung des Raumes
  - → Berechnung einer Funktion

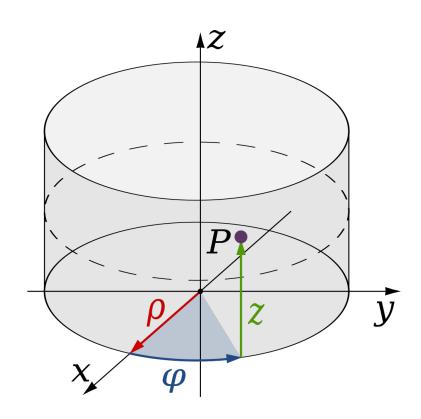


- Diskretisierung des Raumes
  - → Berechnung einer Funktion

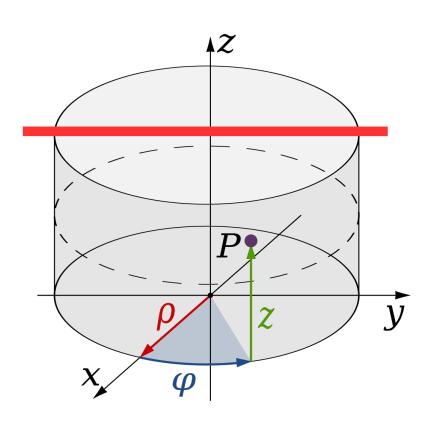
| 0 | 1 | 0 |
|---|---|---|
| 1 | 2 | 1 |
| 0 | 1 | 0 |

→ Colorcoding





$$x = \rho \cos \varphi$$
$$y = \rho \sin \varphi$$
$$z = z$$



$$x = \rho \cos \varphi$$
$$y = \rho \sin \varphi$$
$$z = z$$

