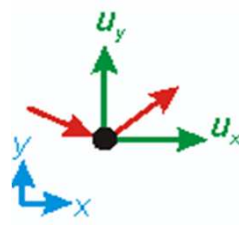
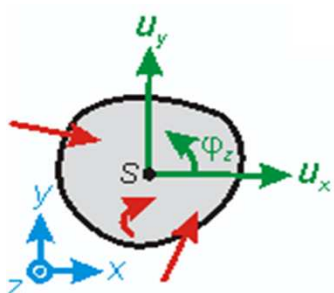
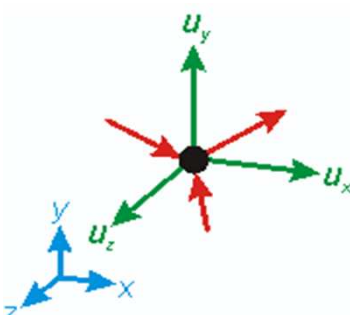
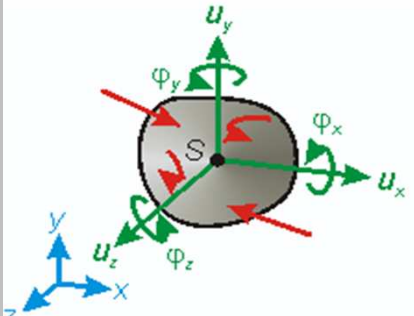


# Lastsysteme, Freiheitsgrade und Gleichgewichtsbedingungen

Lastsystem	Bewegungen		Freiheitsgrad $f$	Gleichgewichtsbed.	
	Translation	Rotation		Kräfte-	Momenten-
Ebenes zentrales Lastsystem 	$u_x$ $u_y$		2	$F_{Rx} = 0$ $F_{Ry} = 0$	
Ebenes allgemeines Lastsystem 	$u_x$ $u_y$	$\varphi_z$	3	$F_{Rx} = 0$ $F_{Ry} = 0$	$M_{Rz} = 0$
Räumliches zentrales Lastsystem 	$u_x$ $u_y$ $u_z$		3	$F_{Rx} = 0$ $F_{Ry} = 0$ $F_{Rz} = 0$	
Räumliches allgemeines Lastsystem 	$u_x$ $u_y$ $u_z$	$\varphi_x$ $\varphi_y$ $\varphi_z$	6	$F_{Rx} = 0$ $F_{Ry} = 0$ $F_{Rz} = 0$	$M_{Rx} = 0$ $M_{Ry} = 0$ $M_{Rz} = 0$