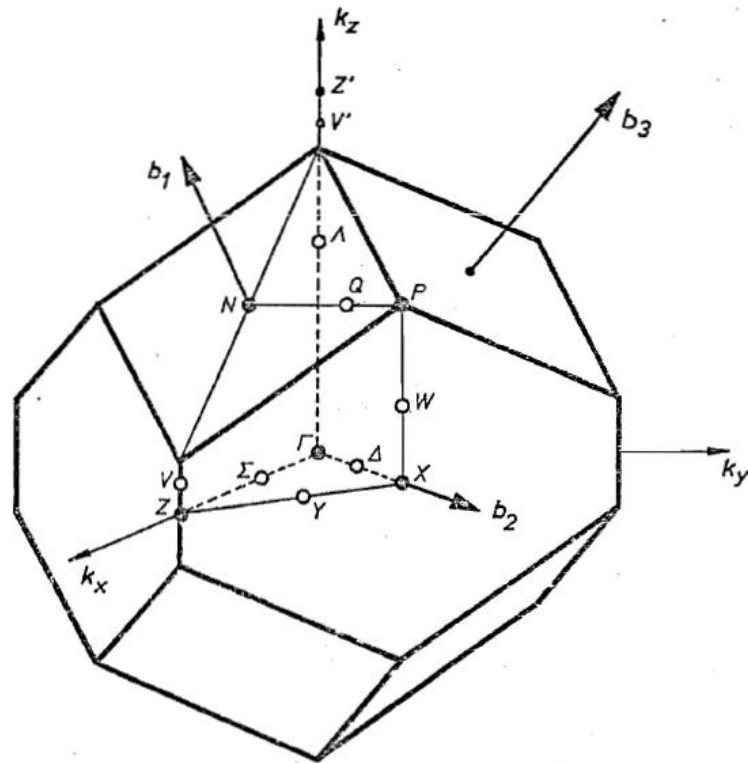


# FIRST BRILLOUIN ZONE OF BODY CENTERED TETRAGONAL LATTICE

Studentproject WS10/11 by Leitner Matthias and Klinser Gregor



CONDITION: $\vec{k} = u \cdot \vec{b}_1 + v \cdot \vec{b}_2 + w \cdot \vec{b}_3 \quad (u, v, w)$ $a = b > c$ $\alpha = \beta = \gamma = 90^\circ$ $\xi = \frac{a^2 + c^2}{4a^2}$	
	$P(\vec{k})$
$\Gamma : (0,0,0)$ $Z : (1/2, 1/2, -1/2)$ $P : (1/4, 1/4, 1/4)$ $X : (0, 1/2, 0)$ $N : (1/2, 0, 0)$	$4/m\bar{3}m$ $4/m\bar{3}m$ $\bar{4}2m$ $m\bar{3}m$ $2/m$
$\Lambda : (w, -w, w) \quad 0 < w \leq \xi$ $V : (1/2 + w, 1/2 - w, -1/2 + w) \quad 0 < w \leq 1/2 - \xi$ $W : (w, 1/2 - w, w) \quad 0 < w < 1/4$ $\Delta : (0, v, 0) \quad 0 < v < 1/2$ $\Sigma : (u, u, -u) \quad 0 < u < 1/2$ $Y : (u, 1/2, -u) \quad 0 < u < 1/2$ $Q : (1/2 - u, u, u) \quad 0 < u < 1/4$	$4mm$ $4mm$ $mm2$ $mm2$ $mm2$ $mm2$ $2$
CHOSEN PARAMETERS: $a = b = 4$ $c = 3$	

