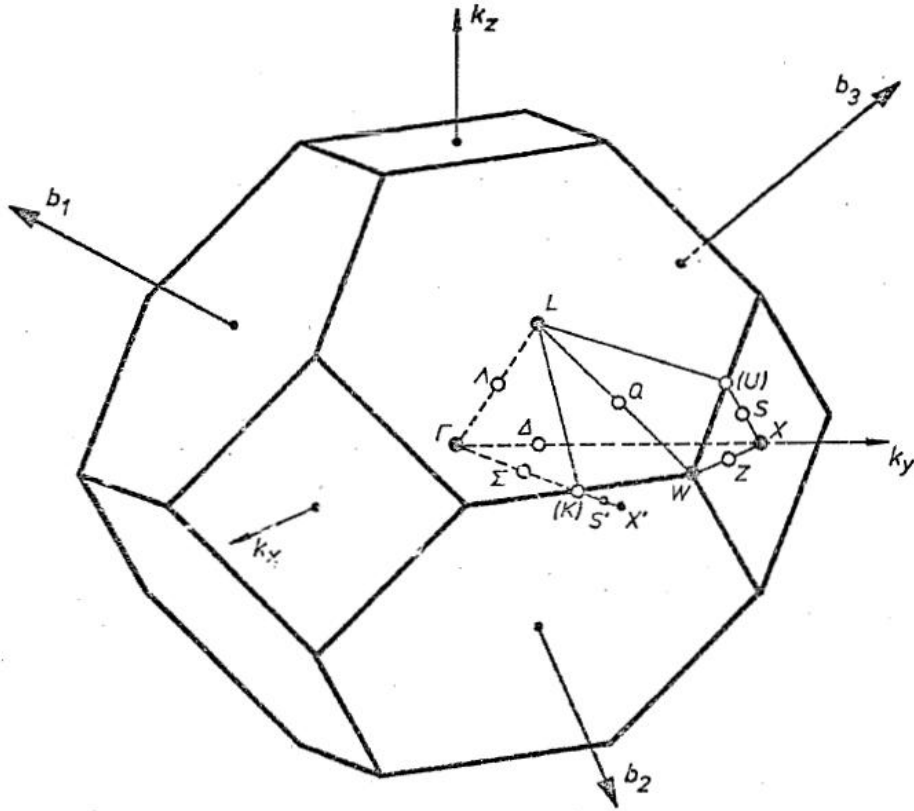


FIRST BRILLOUIN ZONE OF FACE CENTERED CUBIC LATTICE

Studentproject WS10/11 by Leitner Matthias and Klinser Gregor



CONDITION:		$\vec{k} = u \cdot \vec{b}_1 + v \cdot \vec{b}_2 + w \cdot \vec{b}_3 \quad (u, v, w)$
		$a = b = c$
		$\alpha = \beta = \gamma = 90^\circ$
		$P(\vec{k})$
Γ : (0,0,0)		$m\bar{3}m$
X : (0,1/2,1/2)		$4/m\bar{m}m$
L : (1/2,1/2,1/2)		$\bar{3}m$
W : (1/4,3/4,1/2)		$\bar{4}2m$
U : (1/4,5/8,5/8)		$mm2$
K : (3/8,3/4,3/8)		$mm2$
Δ : (0,v,v)	$0 < v < 1/2$	$4mm$
Λ : (w,w,w)	$0 < w < 1/2$	$3m$
Σ : (u,2u,u)	$0 < u \leq 3/8$	$mm2$
S : (2u,1/2+u,1/2+u)	$0 < u \leq 1/8$	$mm2$
Z : (u,1/2+u,1/2)	$0 < u < 1/4$	$mm2$
Q : (1/2-u,1/2+u,1/2)	$0 < u < 1/4$	2

