

### Symmetry Classification for Serial Crystallography Experiments

Laue Class	Point Groups	Centrosymmetric Space Groups	Non-Centrosymmetric Space Groups
$\bar{1}$	1	$P\bar{1}$	P1
2/m	2      m	P2/m, P2 <sub>1</sub> /m, C2/m, P2/c, P2 <sub>1</sub> /c, C2/c	P2, P2 <sub>1</sub> , C2, Pm, Pc, Cm, Cc
mmm	222      mm2	Pmmm, Pnnn, Pccm, Pban, Pmma, Pnna, Pmna, Pcca, Pbam, Pccn, Pbcm, Pnnm, Pmmn, Pbcn, Pbca, Pnma, Cmcn, Cmce, Cmmm, Cccm, Cmme, Ccce, Fmmm, Fddd, Immm, Ibam, Ibca, Imma	P222, P222 <sub>1</sub> , P2 <sub>1</sub> 2 <sub>1</sub> 2, P2 <sub>1</sub> 2 <sub>1</sub> 2 <sub>1</sub> , C222 <sub>1</sub> , C222, F222, I222, I2 <sub>1</sub> 2 <sub>1</sub> 2 <sub>1</sub> , Pmm2, Pmc2 <sub>1</sub> , Pcc2, Pma2, Pca2 <sub>1</sub> , Pnc2, Pmn2 <sub>1</sub> , Pba2, Pna2 <sub>1</sub> , Pnn2, Cmm2, Cmc2 <sub>1</sub> , Ccc2, Amm2, Aem2, Ama2, Aea2, Fmm2, Fdd2, Imm2, Iba2, Ima2
4/m	4 $\bar{4}$	P4/m, P4 <sub>2</sub> /m, P4/n, P4 <sub>2</sub> /n, I4/m, I4 <sub>1</sub> /a	P4, P4 <sub>1</sub> , P4 <sub>2</sub> , P4 <sub>3</sub> , I4, I4 <sub>1</sub> , $P\bar{4}$ , $I\bar{4}$
4/mmm	422 $\bar{4}2m$ 4mm	P4/mmm, P4/mcc, P4/nbm, P4/nnc, P4/mbm, P4/mnc, P4/nmm, P4/ncc, P4 <sub>2</sub> /mmc, P4 <sub>2</sub> /mcm, P4 <sub>2</sub> /nbc, P4 <sub>2</sub> /nnm, P4 <sub>2</sub> /mbc, P4 <sub>2</sub> /mnm, P4 <sub>2</sub> /nmc, P4 <sub>2</sub> /ncm, I4/mmm, I4/mcm, I4 <sub>1</sub> /amd, I4 <sub>1</sub> /acd	P422, P42 <sub>1</sub> 2, P4 <sub>1</sub> 22, P4 <sub>1</sub> 2 <sub>1</sub> 2, P4 <sub>2</sub> 22, P4 <sub>2</sub> 2 <sub>1</sub> 2, P4 <sub>3</sub> 22, P4 <sub>3</sub> 2 <sub>1</sub> 2, I422, I4 <sub>1</sub> 22, $P\bar{4}2m$ , $P\bar{4}2c$ , $P\bar{4}2_1m$ , $P\bar{4}2_1c$ , $P\bar{4}m2$ , $P\bar{4}c2$ , $P\bar{4}b2$ , $P\bar{4}n2$ , $I\bar{4}m2$ , $I\bar{4}c2$ , $I\bar{4}2m$ , $I\bar{4}2d$ , P4mm, P4bm, P4 <sub>2</sub> cm, P4 <sub>2</sub> nm, P4cc, P4nc, P4 <sub>2</sub> mc, P4 <sub>2</sub> bc, I4mm, I4cm, I4 <sub>1</sub> md, I4 <sub>1</sub> cd
$\bar{3}$	3	$P\bar{3}$ , $R\bar{3}$	P3, P3 <sub>1</sub> , P3 <sub>2</sub> , R3
$\bar{3}m$	32      3m	$P\bar{3}1m$ , $P\bar{3}1c$ , $P\bar{3}m1$ , $P\bar{3}c1$ , $R\bar{3}m$ , $R\bar{3}c$	P312, P321, P3 <sub>1</sub> 12, P3 <sub>1</sub> 21, P3 <sub>2</sub> 12, P3 <sub>2</sub> 21, R32, P3m1, P31m, P3c1, P31c, R3m, R3c
6/m	6 $\bar{6}$	P6/m, P6 <sub>3</sub> /m	P6, P6 <sub>1</sub> , P6 <sub>5</sub> , P6 <sub>2</sub> , P6 <sub>4</sub> , P6 <sub>3</sub> , $P\bar{6}$
6/mmm	622 $\bar{6}2m$ 6mm	P6/mmm, P6/mcc, P6 <sub>3</sub> /mcm, P6 <sub>3</sub> /mmc	P622, P6 <sub>1</sub> 22, P6 <sub>5</sub> 22, P6 <sub>2</sub> 22, P6 <sub>4</sub> 22, P6 <sub>3</sub> 22, $P\bar{6}m2$ , $P\bar{6}c2$ , $P\bar{6}2m$ , $P\bar{6}2c$ , P6mm, P6cc, P6 <sub>3</sub> cm, P6 <sub>3</sub> mc
$m\bar{3}$	23	$Pm\bar{3}$ , $Pn\bar{3}$ , $Fm\bar{3}$ , $Fd\bar{3}$ , $Im\bar{3}$ , $Pa\bar{3}$ , $Ia\bar{3}$	P23, F23, I23, P2 <sub>1</sub> 3, I2 <sub>1</sub> 3
$m\bar{3}m$	432 $\bar{4}32$	$Pm\bar{3}m$ , $Pn\bar{3}n$ , $Pm\bar{3}n$ , $Pn\bar{3}m$ , $Fm\bar{3}m$ , $Fm\bar{3}c$ , $Fd\bar{3}m$ , $Fd\bar{3}c$ , $Im\bar{3}m$ , $Ia\bar{3}d$	P432, P4 <sub>2</sub> 32, F432, F4 <sub>1</sub> 32, I432, P4 <sub>3</sub> 32, P4 <sub>1</sub> 32, I4 <sub>1</sub> 32, $P\bar{4}3m$ , $F\bar{4}3m$ , $I\bar{4}3m$ , $P\bar{4}3n$ , $F\bar{4}3c$ , $I\bar{4}3d$