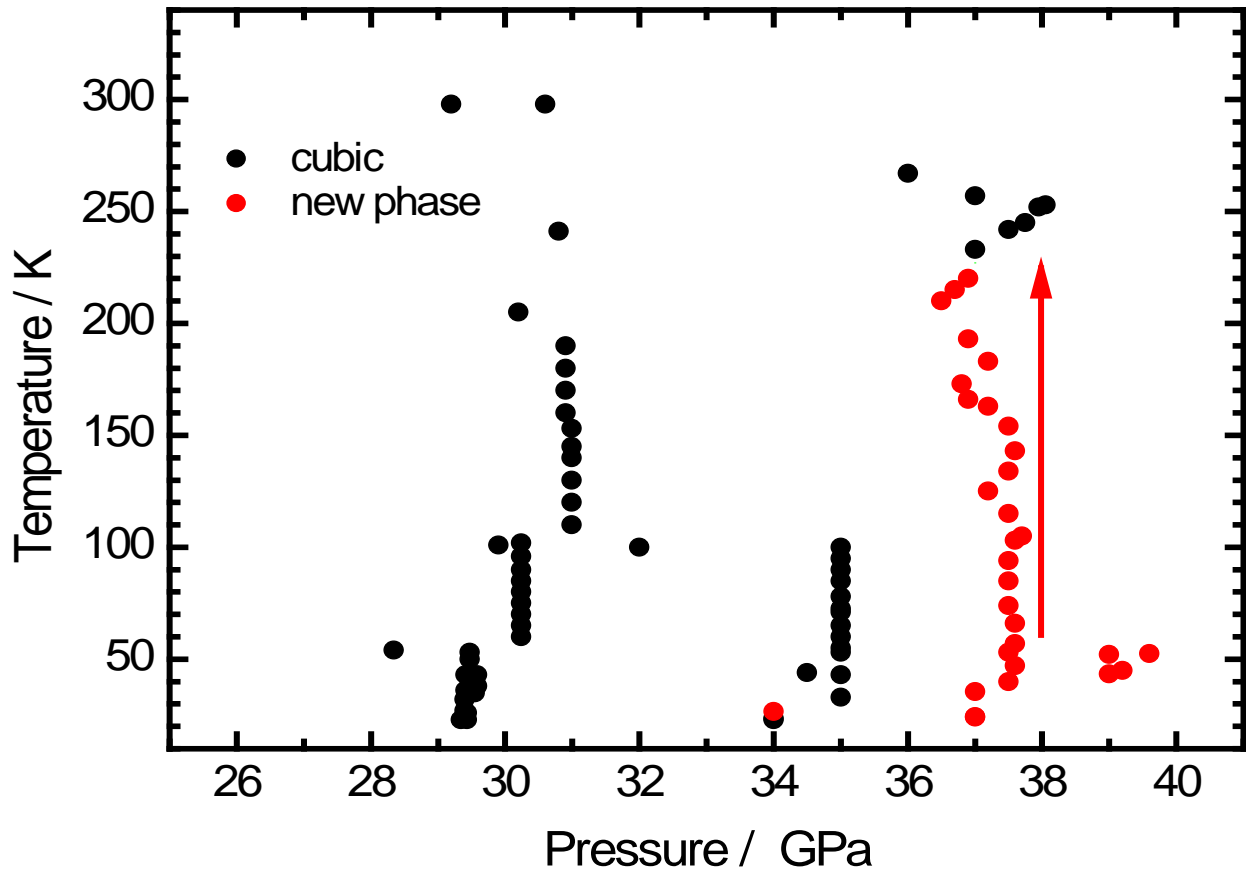


## Report HS 4044 Calcium at high pressures and low temperatures

Using the diffraction data collected at ID09a of the ESRF, a new high-pressure form of Ca could be observed for the first time. The new x-ray diffraction pattern is composed of residual  $Im\bar{3}m$  modification and a second phase which is different to the one observed in a recent independent investigation [1]. The positions measured at the ESRF can be indexed on the basis of a tetragonal lattice.



[1] W.L. Mao et al., PNAS USA 107(22), 9965-9968 (2010).