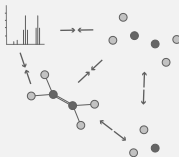## masked modelling

predicting masked bonds
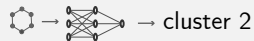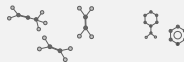
contrastive learning

aligning embeddings
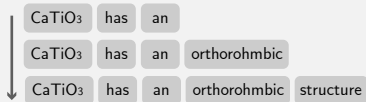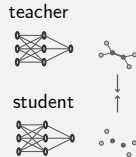
clustering

cluster 1   cluster 2

learning to label

next token prediction

CaTiO$_3$	has	an		
CaTiO$_3$	has	an	orthorohmbic	
CaTiO$_3$	has	an	orthorohmbic	structure

learning from context

self-distillation

teacher
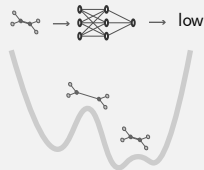

student

learning to align

energy-based models

 → low

learning rules