

# Twinning tests: correlated structure factors

- OD twin: twin axis || NCS axis
- Twin-related structure factors of an individual crystal **correlate**
- The model of random atoms is not valid.

**Red:** correlation = 0  
(conventional references)

**Magenta:** intermediate correlations

**Blue:** correlation = 0.99  
(higher point group)

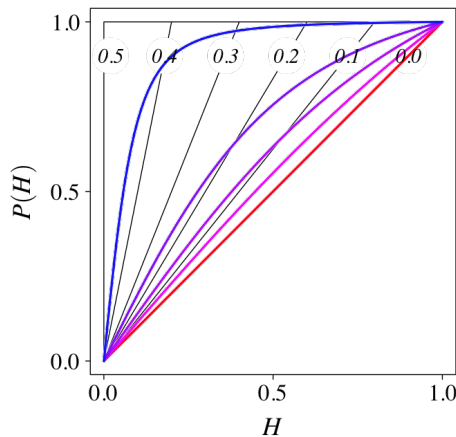
Partial twinning test (H-test)

the apparent twinning fraction is **higher** for correlated s.f.

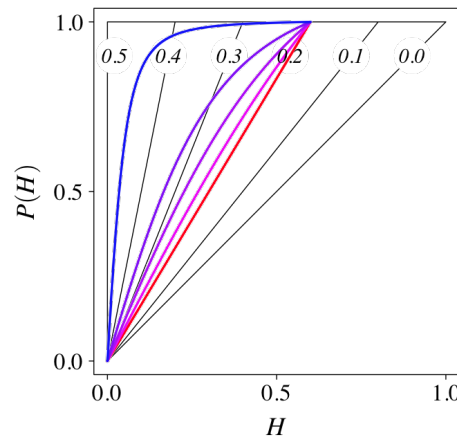
Perfect twinning test  
(cumulative distribution of Z)

the apparent twinning fraction is **lower** for correlated s.f.

$\alpha=0.0$



$\alpha=0.2$



$\alpha=0.5$

