

# Report on the results obtained during the HS-4582 experiment

The goal of this experiment was to measure super-structure reflections at low temperature in order to determine the tilt system present in our thin films. This would have allowed for the comparison between the first-principle-based calculation results and the experimental one.

The cryostat did not allow us to go below 100K. As a consequence, despite our best efforts we could not find super-structure reflections. As a consequence, our results were limited to an upper-bound for the transition temperature and very precise lattice parameters as a function of temperature.

These results have not been published yet, but are still part of a much larger project about double perovskites.