Exothermic CSTR: hard projection vs. soft penalty over training

(a) Constraint violation vs. epoch

(b) Accuracy vs. epoch

Legend:
- No constraint
- Soft ($\lambda = 1$)
- Soft ($\lambda = 10$)
- Hard (projection)

Hard: 0.00% (all epochs)

y-axis (a): Positivity violation (%)
y-axis (b): Normalized MSE (long horizon)
x-axis: Training epoch