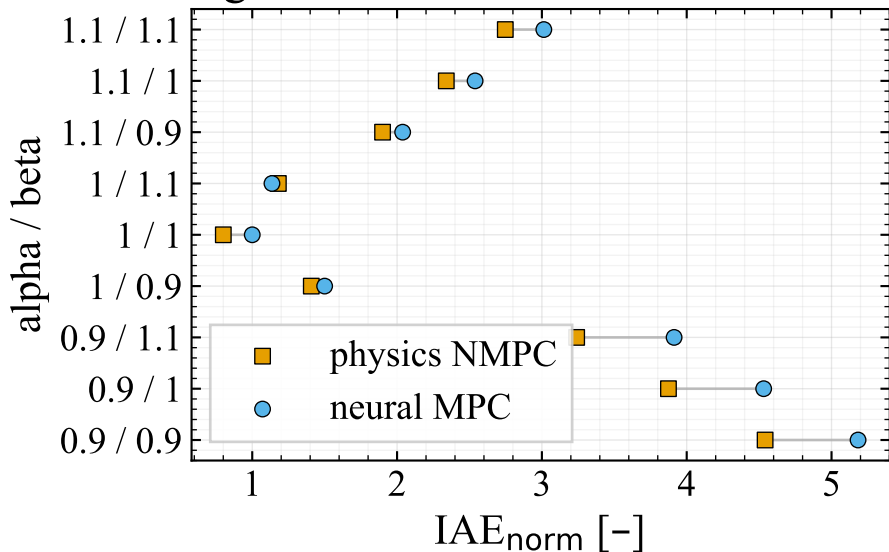


# CSTR: degradation under identical mismatch



Paired by mismatch case: both controllers hold a nominal model while the plant has drifted, so both carry the same model error. The neural controller is worse in 8 of 9 cases. The two formulations differ in one further respect, which predates this suite: the physics NMPC bounds  $F$  below at  $5 \text{ h}^{-1}$  (0.05 of its normalized range), the neural controller at 0.