Reducing the RH time constant

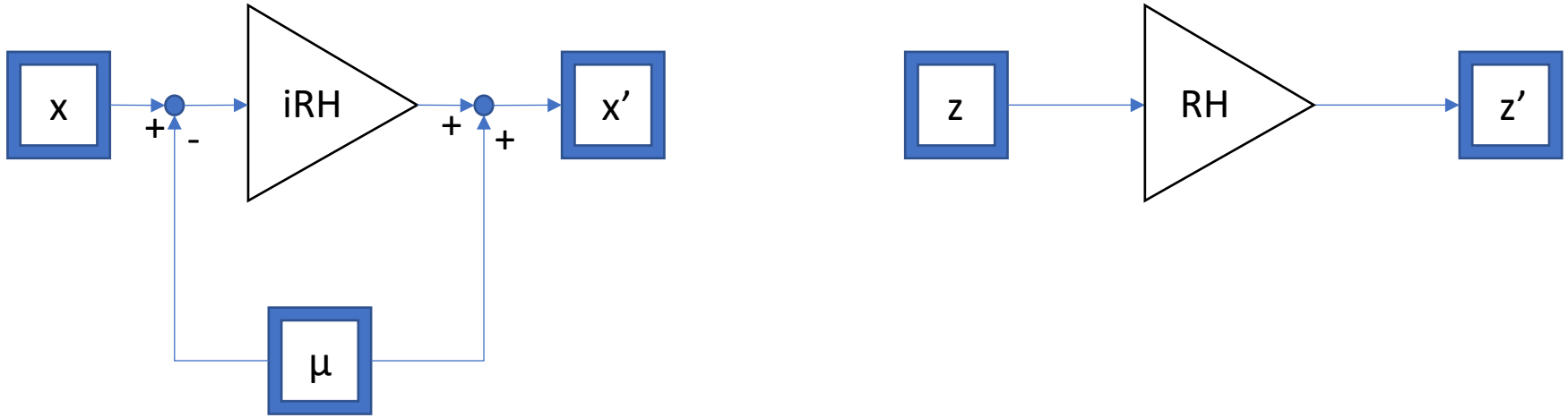
- For every step power request, you introduce an abrupt differential in power delivered to your optic which causes over-lensing for an extended period of time (on the order of 10 + hours)

Inverting the RH response

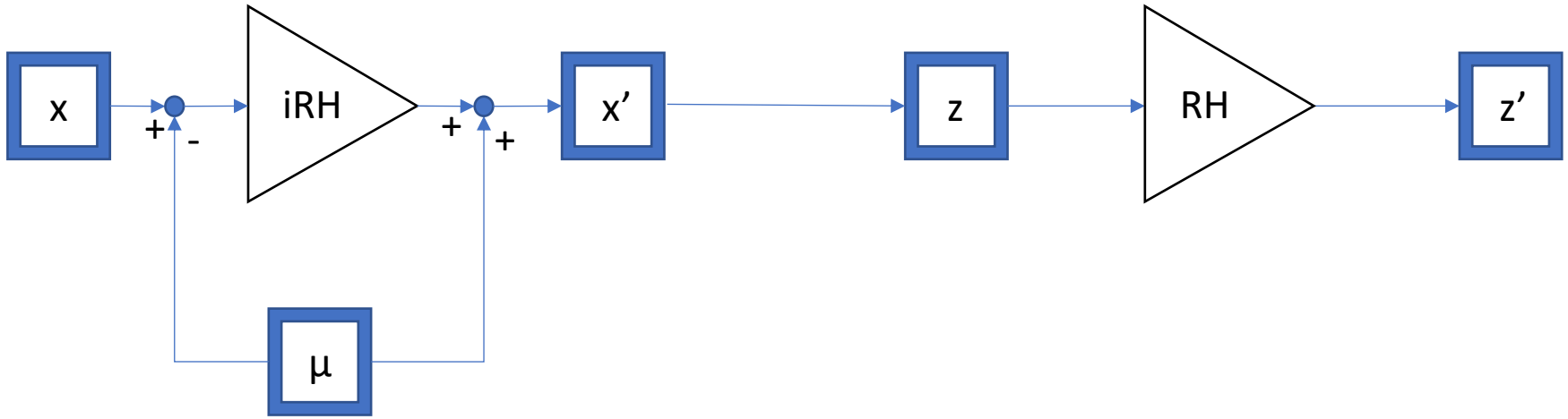
- Get an uninterrupted step response of your plant (RH TM system)
- Get the best stable zpk fit of your plant filter
- Swap your zeros and poles

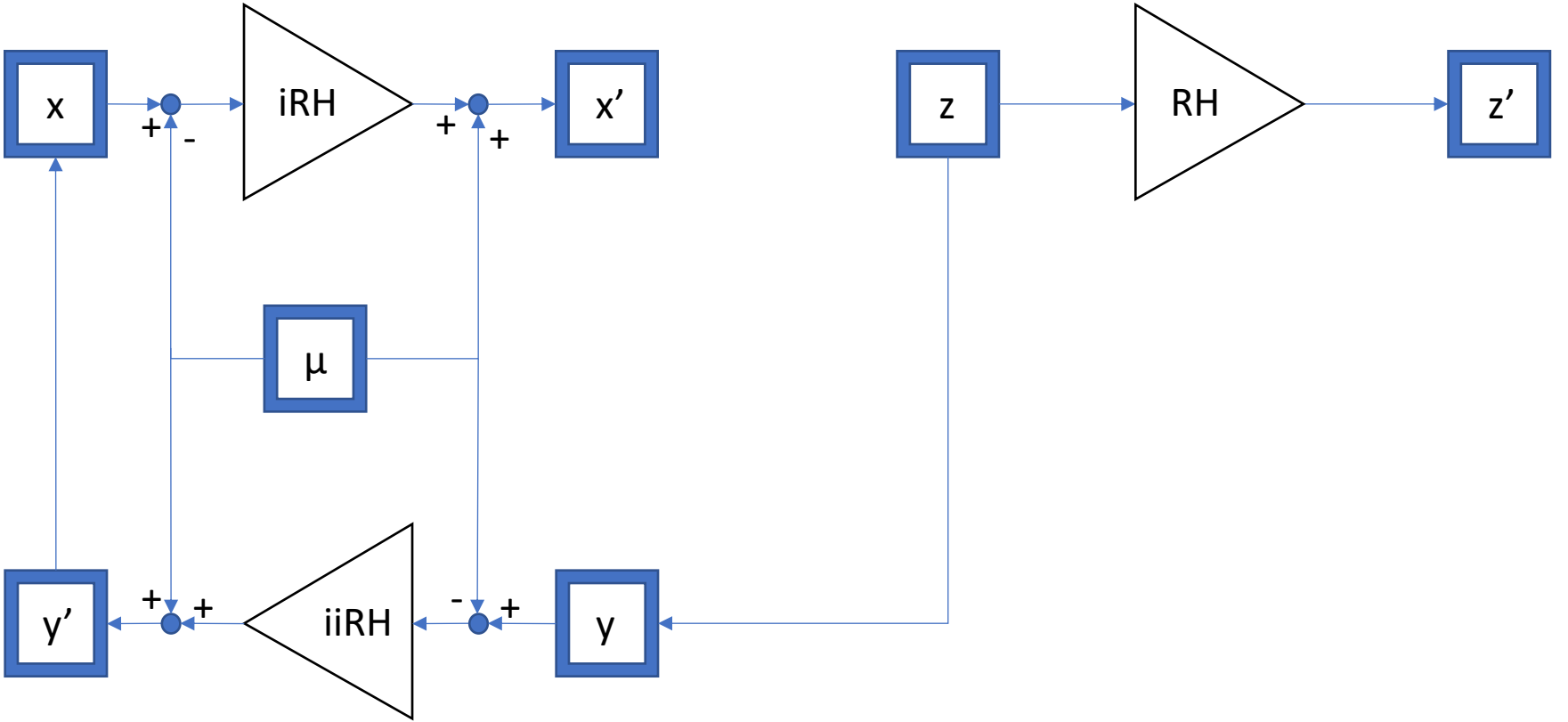
- Using the HWS data you can invert the response to yield a step lens for any requested

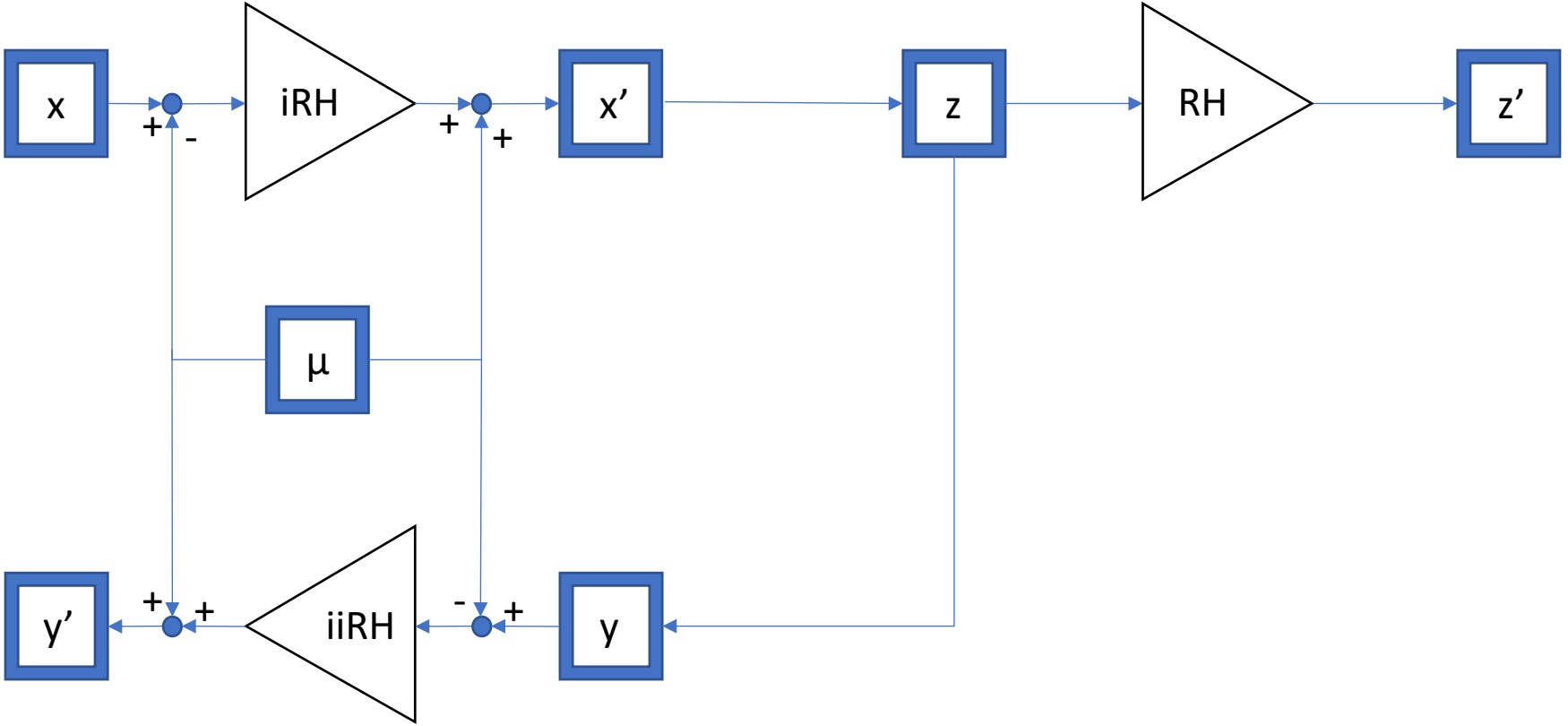
NOMINAL(before 01/11/2018)



FILTER_RH_INPUT (before 01/11/2018)




x
iRH
x'
z
RH
z'
μ
y'
iiRH
y
+
-
+
+
+
+
+
-
+


x
+
-
iRH
+
+
x'
z
RH
z'
μ
y'
+
+
iiRH
-
+
y

RESET (after 01/11/2018)

FROM NOMINAL:
This state makes it so the current value from the Beckhoff channel is stored into the ’$OPTICF_RH_PRIORVAL’ and the iRH as well as the iiRH filters have their histories cleared.

FROM FILTER_RH_INPUT:
This state makes it so that the input of the inverse filter is set into the ‘$OPTIC_RH_PRIORVAL’ and the iRH as well as the iiRH filters have their histories cleared.