## Summary on Design Trade-offs

From what we have seen so far:

- ▶ *p* large good damping, but bad noise suppression (too close to PD); the branches first break in (meet at the real axis), then break away.
- ▶ p small noise suppression is better, but RL is too close to  $j\omega$ -axis, which is not good; no break-in for small values of p.
- ▶ intermediate values of p transition between two types of RL; break-in and break-away points are the same.

