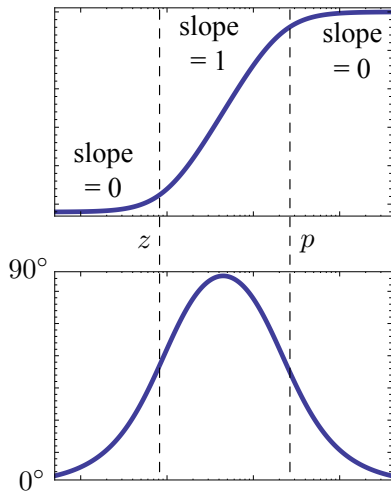# Lead Compensation: Bode Plot

$$KD(s) = \frac{K\left(\frac{s}{z} + 1\right)}{\left(\frac{s}{p} + 1\right)}$$

▶ magnitude levels off at high frequencies $\implies$ better noise suppression

▶ adds phase, hence the term "phase lead"