

# Project 4

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• How many INDEPENDENT parameters?

• Parameter study:

\* choose  $P_1, P_2, P_3, \dots$  as in the textbook  
independent parameters

\* Keep  $P_2, P_3, \dots$  fixed and vary  $P_1$   $\left\{ \begin{array}{l} \bullet 10 \text{ times smaller} \\ \vdots \\ \bullet 10 \text{ times larger} \end{array} \right.$   
→ effect of varying  $P_1$

\* Keep  $P_1, P_3, \dots$  fixed and vary  $P_2$   $\left\{ \begin{array}{l} \bullet 10 \text{ times smaller} \\ \vdots \\ \bullet 10 \text{ times larger} \end{array} \right.$   
→ effect of varying  $P_2$

\* Keep  $P_1, P_2, \dots$  fixed and vary  $P_3$   $\left\{ \begin{array}{l} \bullet 10 \text{ times smaller} \\ \vdots \\ \bullet 10 \text{ times larger} \end{array} \right.$   
→ effect of varying  $P_3$



Which values of  $P_1, P_2, P_3, \dots$

are best for the forest gray image?

• DELICATE points:

\* Image  $I(x,y)$

→ Check the range of grey levels!

\* Take the  $\ln [A + I(x,y)]$

→ What about  $A$ ?

\* Take the DFT

→ Check the zero-padding needed, considering that the DFT can only be applied confidently when the image size is a power of 2, whatever the textbook or Matlab may tell you !!