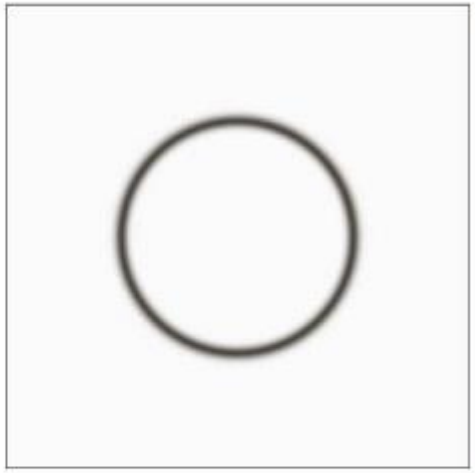
Selective Filtering:

- Bandpass
- Band Reject
- Notch

- Bandreject and Bandpass Filter
  - $H_{BP}(u, v) = 1 - H_{BR}(u, v)$



Ideal	Butterworth	Gaussian
$H(u,v) = \begin{cases} 0 & \text{if } D_0 - \frac{W}{2} \le D \le D_0 + \frac{W}{2} \\ 1 & \text{otherwise} \end{cases}$	$H(u,v) = \frac{1}{1 + \left[\frac{DW}{D^2 - D_0^2}\right]^{2n}}$	$H(u,v) = 1 - e^{-\left[\frac{D^2 - D_0^2}{DW}\right]^2}$

- Notch Filters:
  - Pass/Reject predefined, both (u_0, v_0) and $(-u_0, -v_0)$
  - $H_{NP}(u, v) = 1 - H_{NR}(u, v)$