

$$z[n] = \boldsymbol{w}^H[n]\boldsymbol{x}[n],$$

where

$$oldsymbol{w}[n] = rac{oldsymbol{R}^{-1}[n]oldsymbol{a}}{oldsymbol{a}^Holdsymbol{R}^{-1}[n]oldsymbol{a}}$$

and

$$\mathbf{R}[n] = E\{\mathbf{x}[n]\mathbf{x}^H[n]\}$$

$$\frac{\mathbf{2}}{\mathbf{p}}$$

Computing  $\mathbf{R}^{-1}[n]\mathbf{a}$   $\mathbf{O}(\mathbf{M}^3)$ 

Estimate R[n] O(M<sup>2</sup>)