

DMD

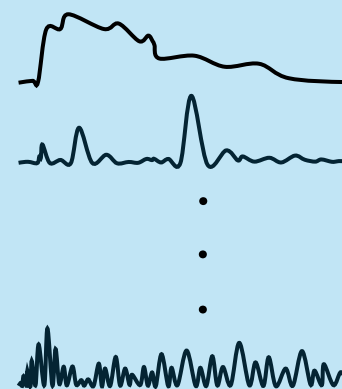
Input spectrum
 $[x_1, x_2, x_3 \dots x_N]$

Delay
Embedding

x_1	x_2	.	.	x_L
x_2	x_3	.	.	x_{L+1}
.
.
x_M	x_{M+1}	.	.	x_N

Hankel matrix

DMD



M modes

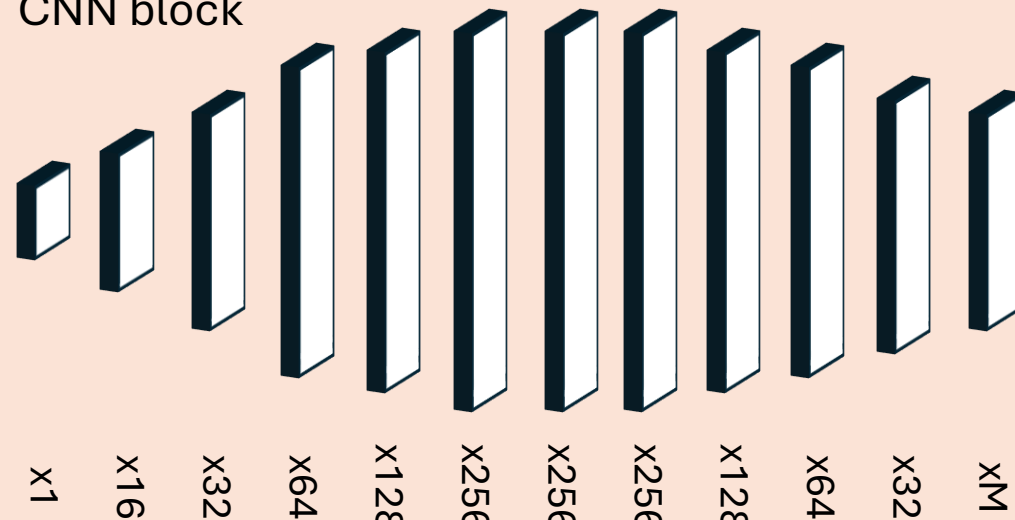
X_M

Deep Learning

Output spectrum
 $[y_1, y_2, y_3 \dots y_N]$

Up-
sampling

CNN block



$$\tilde{X}_M = s \cdot X_M$$

Scale

s

SE block
(Attention)

GAP

FC

ReLU

FC

Sigmoid