

Thin-walled part

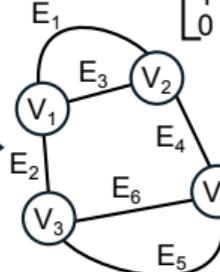


toplogical  
skeleton

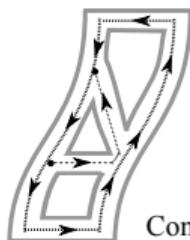
Initial graph model

$$\begin{bmatrix} 0 & 2 & 1 & 0 \\ 2 & 0 & 0 & 1 \\ 1 & 0 & 0 & 2 \\ 0 & 1 & 2 & 0 \end{bmatrix}$$

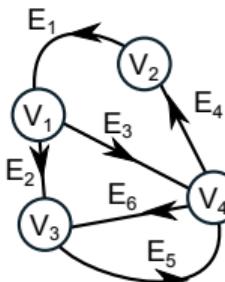
Consideration of the  
global rules



$$\begin{bmatrix} 0 & 1 & 1 & 1 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 2 \\ 1 & 1 & 2 & 0 \end{bmatrix}$$



Consideration of the  
local rules



Random selection  
of an adapted path

$$\begin{bmatrix} -1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & -1 & 1 \\ 0 & 0 & -1 & 1 & -1 & 1 \end{bmatrix}$$

Real

Virtual