Vertex Computation Complexity

High

GaAN

SSE

$O((f + d_{in}) * d_{out})$

GraphSAGE-LSTM

GGNN

$O(d_{in} * d_{out})$
12 parameters

Low $O(1)$ $\quad$ $O(d_{in})$ $\quad$ $O(d_{in} * d_{out})$

Two Sub-layers

Four Sub-layers

Edge Computation Complexity

High

GAT-avg

$O(d_{in} * d_{out})$
K parameter

GAT-concat

GraphSAGE-Mean
Neural FPs

GCN $\quad$ AGCN

$O(d_{in} * d_{out})$
1 parameter

ChebNet (sub-layer)

$O(d_{out})$

GraphSAGE-pool $\quad$ $O(1)$ $\quad$ **Low**