Math 789 - Spectral Networks

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1 Spatial Construction

To prove: $O(S_k \cdot |\Omega_k| \cdot f_k \cdot f_{k-1}) = O(n)$

The paper states, $S_k \cdot |\Omega_k| \approx \alpha \cdot |\Omega_{k-1}|$
$\Omega_k - 1$ could be at max n
and, $f_k or f_{k-1}$ will be $< n$
Therefore, $O(S_k \cdot |\Omega_k| \cdot f_k \cdot f_{k-1})$ has to be $< n$ i.e. $O(n)$