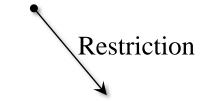
## **Solve Phase**

$$A^{k}u^{k} = f^{k}$$

$$f^{k+1} = I_{k}^{k+1}(f^{k} - A^{k}u^{k})$$

$$A^{k}u^{k} = f^{k}$$

$$u^{k} \leftarrow u^{k} + I_{k+1}^{k}u^{k+1}$$

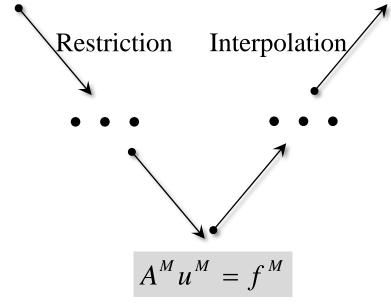


$$A^{k+1}u^{k+1} = f^{k+1}$$

$$f^{k+2} = I_{k+1}^{k+2} (f^{k+1} - A^{k+1}u^{k+1})$$



$$A^{k+1}u^{k+1} = f^{k+1}$$
$$u^{k+1} \leftarrow u^{k+1} + I_{k+2}^{k+1}u^{k+2}$$



Direct Solver