

SOR continued:

Where correction = a_{ii}

$$u_i^k = (1-\lambda)u_i^{k-1} + \lambda(\text{correction})$$

• if $\lambda > 1$ is overrelaxation
• $1 < \lambda < 2$ to avoid blowup

• Play w/ Lambda (λ) b/w (1 to 2) and see effects.

• General info: all unknowns lead to array composed of segments

• General info: good composing matrix to store:

if you do, use color map.

• Given PDE

• Write code: - ~~employe~~ - Chapt, restart capability

- some control

- Visualization

- Performance/efficiency measurement.

- Code optimization

$$CFL^x = \frac{\Delta t D}{\Delta y^2} \quad \& \quad \frac{\Delta t D}{\Delta x^2}$$