isl (4)

$$[3i : 3i + 3 > 0]$$

$$[-2/3 \quad -1/3 \quad 0 \quad 1/3 \quad 2/3 \quad \ldots]$$

$$[3i + 3 : 3i \geq -2]$$

$$[1 \quad 2 \quad 3 \quad 4 \quad \ldots] \quad \mathbb{N}$$

$$\{S[\,],\ T[i]\}$$

schedule tree

$$\begin{array}{ccc} & \{S[\,],\ T[i]\} & \\ \swarrow & & \searrow \\ \bot & & T[i] \to [i] \\ & & | \\ & & \bot \end{array}$$

$$\{S0[i] \to [[\,] \to [i]]\}$$

scatter schedule

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schedule tree

$$\begin{tikzcd} & \{S[\,], T[i]\} \arrow[dl, dash] \arrow[dr, dash] & \\ \perp & & T[i] \to [i] \arrow[d, dash] \\ & & \perp \end{tikzcd}$$

$$\{S0[i] \to [[\,] \to [i]]\}$$

scatter schedule

pw_multi_aff

$\{[(i),(i-1)] : i>0\}$

multi_pw_aff

$\{[((i), i>0), ((i-1), i>0)]$

$\{[i\emptyset], [0\emptyset]\}$ spaces

Domain $\{S[i] : i>3$ and $i<6$

Linear transform

$f(\bar{u}+\bar{v}) = f(\bar{u}) + f(\bar{v})$

$f(c\bar{u}) = c f(\bar{u})$

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$$\frac{-y\,dx + x\,dy}{x^2+y^2} = \frac{+r\cos\theta \cdot r\cos}{r^2 \cancel{x^2+y^2}}$$

$$+ \frac{+r\sin\theta \cdot r\sin\theta}{\cancel{x^2+y^2}\, r^2} = +1$$

$$\frac{-y\,dx + x\,dy}{x^2+y^2} = P(x, y)\,dx$$
$$+ Q(x, y)\,d$$

$$\frac{\partial P}{\partial y} = \frac{-(x^2+y^2)\cancel{x} + y(2y)}{(x^2+y^2)^2} = \frac{y^2-}{(x^2+y^2}$$

$$\frac{\partial Q}{\partial x} = \frac{x^2+y^2 - 2x(x)}{(x^2+y^2)^2} = \frac{(y^2 - x^2}{(x^2+y^2)}$$

$$\boxed{\frac{\partial P}{\partial y} = \frac{\partial Q}{\partial x}}$$ closed

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eigen C

$$\begin{vmatrix} a & b \\ c & d \end{vmatrix} \begin{vmatrix} x \\ y \end{vmatrix} = \underbrace{c \begin{vmatrix} x \\ y \end{vmatrix}}_{\text{eigenvector}}$$

$$\left(\begin{vmatrix} a & b \\ c & d \end{vmatrix} - c\underline{I} \right) \begin{vmatrix} x \\ y \end{vmatrix} = \begin{vmatrix} 0 \\ 0 \end{vmatrix}$$

$$\begin{bmatrix} a - \lambda \underline{I} & b \\ c & d - \lambda \underline{I} \end{bmatrix} = 0$$

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