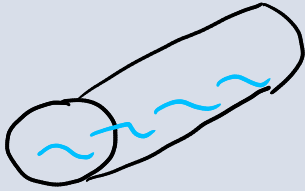


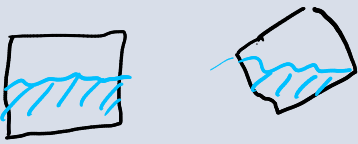
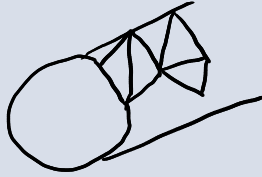
— мат. модели (нейстр.)

— мемора

— компьютера



1) модель отсела

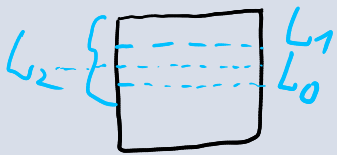
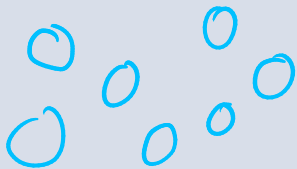


2) модель жидкости

— ДУЧП (анализич. реш.)

— числ. схемы

— SPH (Smoothed particle hydrodynamics)



$V = \dots$ $L = ?$ $(L - L_2) \leq \epsilon \text{ м}$

1) $|V - V_0|$

2) $|V - V_1|$

3) $|V - V_2| \leq \epsilon \text{ м}^3$

yo oprimyut long delta

$$x^2 - y^2 = (x - y)(x + y)$$

$$+ \textcircled{+} \\ \delta_1 = \frac{(x \ominus y) - (x - y)}{x - y}$$

$$x \ominus y = (x - y)(1 + \delta_1)$$

$$x \textcircled{+} y = (x + y)(1 + \delta_2)$$

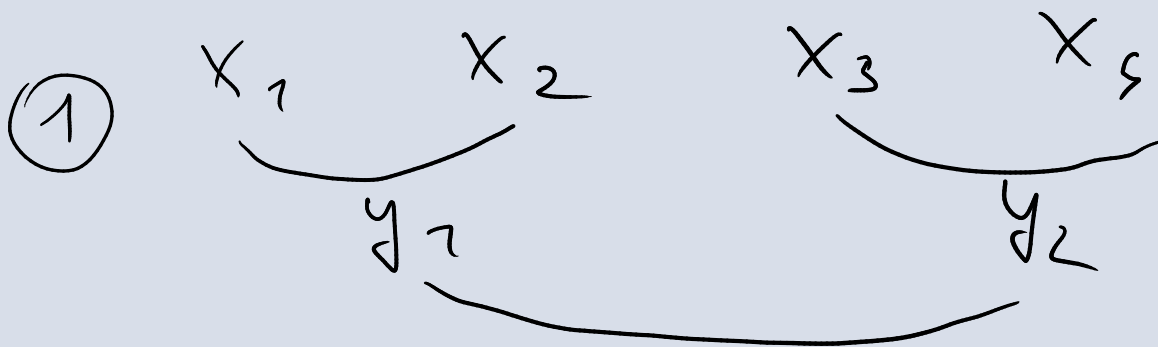
$$x \textcircled{*} y = xy(1 + \delta_3)$$

1) 2 parametra

2) summa. Soobrazno raz-ba raven

float sum = 0;

for (...); sum += x[i];



② Summa kaxeta



```
#pragma omp simd
for (int i=0; i < n; ++i)
  c[i] = a[i] + b[i];
```



```
for (int i=0; i < n; i+=4)
  c[i] = a[i] + b[i];
  c[i+1] = a[i+1] + b[i+1];
  i+2 ---
  i+3 ---
```

- 03
- march = native
- fopenmp