

## Metoda Banachiewicza-Cholesky'ego

$\tilde{A}$

15	-1	2	2
-1	14	0	1
2	0	13	-1
2	1	-1	12

$$\tilde{A} := \begin{pmatrix} 15 & -1 & 2 & 2 \\ -1 & 14 & 0 & 1 \\ 2 & 0 & 13 & -1 \\ 2 & 1 & -1 & 12 \end{pmatrix}$$

$$L_{i,i} = \sqrt{A_{i,i} - \sum_{k=1}^{i-1} (L_{i,k})^2}$$

$$L_{i,j} = \left[ A_{i,j} - \sum_{k=1}^{j-1} (L_{i,k} \cdot L_{j,k}) \right] \cdot \frac{1}{L_{j,j}}$$

$$j < i$$

$L =$

	1	2	3	4
1	3.873	0	0	0
2	-0.2582	3.7327	0	0
3	0.5164	0.0357	3.5682	0
4	0.5164	0.3036	-0.358	3.3931