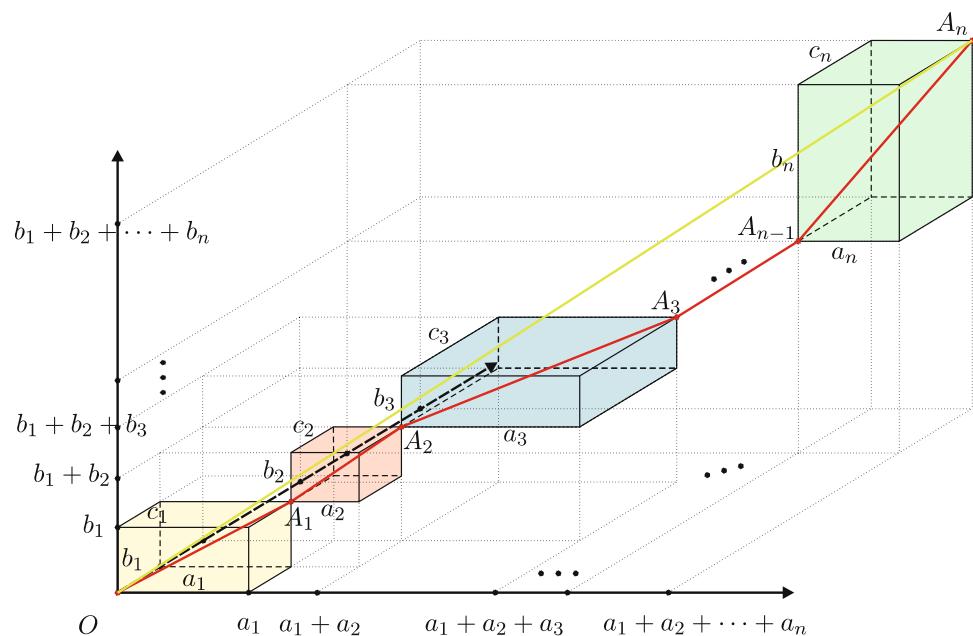




# Proof without Words: Inequality for the Sum of the Diagonals

NENAD STOJANOVIC

$$\begin{aligned} & \sqrt{a_1^2 + b_1^2 + c_1^2} + \sqrt{a_2^2 + b_2^2 + c_2^2} + \sqrt{a_3^2 + b_3^2 + c_3^2} + \cdots + \sqrt{a_n^2 + b_n^2 + c_n^2} \\ & \geq \sqrt{(a_1 + a_2 + \cdots + a_n)^2 + (b_1 + b_2 + \cdots + b_n)^2 + (c_1 + c_2 + \cdots + c_n)^2}. \end{aligned}$$



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